

# 1. SCIAMACHY Level 1B source packet monitoring report

## [1.1. General Info](#)

## [1.2 Source packet monitoring](#)

### 1.1 General Info

This report contains results of the analysis on source packets from SCIAMACHY level 1 data (The SCI\_NL\_\_1P product).

#### 1.1.1 Report summary

The table below shows general characteristics of the data that are included into this report.

Item	Value
Report version	1.1 (07-01-2010)
Time of report generation	13AUG2011 06:30:23
Data source version	SCIA/7.04-U
Processing scope for products	31JUL2011 00:00:00 to 01AUG2011 00:00:00
Start time of first product within scope	31JUL2011 01:09:09
Stop time of last product within scope	31JUL2011 22:22:15
Total number of level 1 products	13
Number of level 1 products with errors	0
SCIAL1C executable used in processing	Unknown
SCIAL1C parameters used in processing	Unknown

#### 1.1.2 Source packet summary

The table below shows which source packets have been included into the report.

Item	Mode	State	Cluster	Height	First start time	Last start time
0	NADIR	07	08	N/A	31JUL2011 01:41:12.323	31JUL2011 21:54:17.321
1	NADIR	07	09	N/A	31JUL2011 01:41:12.323	31JUL2011 21:54:17.321
2	NADIR	07	15	N/A	31JUL2011 01:41:12.323	31JUL2011 21:54:17.321
3	NADIR	07	24	N/A	31JUL2011 01:41:12.323	31JUL2011 21:54:17.321
4	NADIR	07	55	N/A	31JUL2011 01:41:12.323	31JUL2011 21:54:17.321
5	LIMB	32	09	~19 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626
6	LIMB	32	09	~22 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626
7	LIMB	32	09	~25 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626
8	LIMB	32	15	~22 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626
9	LIMB	32	15	~25 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626
10	LIMB	32	15	~35 km	31JUL2011 01:28:01.691	31JUL2011 21:57:28.626

#### 1.1.3 Summary per product

The following table shows a summary for each product used in this report.

Products are linked to a corresponding server directory for view/download. Note: Link access may be restricted by security settings of your internet browser or firewall.

#	Product name	Start time	Stop time	ProdErr	#nadir	#limb	#occ	#mon	#nopro	#cmpl_drk	#incmpl_drk	Decont
0	<a href="#">SCI_NLC_1CUDPA20110731_010338_000060153105_00089_49241_0502.N1</a>	31JUL2011 01:09:09	31JUL2011 02:19:24	0	35	31	0	0	1	0	0	
1	<a href="#">SCI_NLC_1CUDPA20110731_024357_000060063105_00090_49242_0504.N1</a>	31JUL2011 02:49:23	31JUL2011 03:59:52	0	36	30	0	0	1	0	0	
2	<a href="#">SCI_NLC_1CUDPA20110731_042407_000060153105_00091_49243_0505.N1</a>	31JUL2011 04:29:38	31JUL2011 05:39:52	0	35	31	0	0	1	0	0	
3	<a href="#">SCI_NLC_1CUDPA20110731_060426_000060063105_00092_49244_0508.N1</a>	31JUL2011 06:09:52	31JUL2011 07:20:21	0	36	30	0	0	1	0	0	
4	<a href="#">SCI_NLC_1CUDPA20110731_074435_000060153105_00093_49245_0510.N1</a>	31JUL2011 07:50:06	31JUL2011 09:00:21	0	35	31	0	0	1	0	0	
5	<a href="#">SCI_NLC_1CUDPA20110731_092454_000060063105_00094_49246_0512.N1</a>	31JUL2011 09:30:21	31JUL2011 10:40:50	0	36	30	0	0	1	0	0	

6	SCI_NLC_1CUDPA20110731_110504_000060153105_00095_49247_0513.N1	31JUL2011 11:10:35	31JUL2011 12:20:49	0	35	31	0	0	1	0	0	
7	SCI_NLC_1CUDPA20110731_124523_000060063105_00096_49248_0516.N1	31JUL2011 12:50:49	31JUL2011 14:01:18	0	36	30	0	0	1	0	0	
8	SCI_NLC_1CUDPA20110731_142532_000060153105_00097_49249_0518.N1	31JUL2011 14:31:03	31JUL2011 15:41:18	0	35	31	0	0	1	0	0	
9	SCI_NLC_1CUDPA20110731_160551_000060063105_00098_49250_0520.N1	31JUL2011 16:11:18	31JUL2011 17:21:47	0	36	30	0	0	1	0	0	
10	SCI_NLC_1CUDPA20110731_174601_000060153105_00099_49251_0522.N1	31JUL2011 17:51:32	31JUL2011 19:00:51	0	34	29	0	1	1	0	0	
11	SCI_NLC_1CUDPA20110731_192620_000060063105_00100_49252_0524.N1	31JUL2011 19:31:46	31JUL2011 20:42:26	0	36	30	0	1	1	0	0	
12	SCI_NLC_1CUDPA20110731_210630_000060153105_00101_49253_0525.N1	31JUL2011 21:12:01	31JUL2011 22:22:15	0	35	31	0	0	1	0	0	

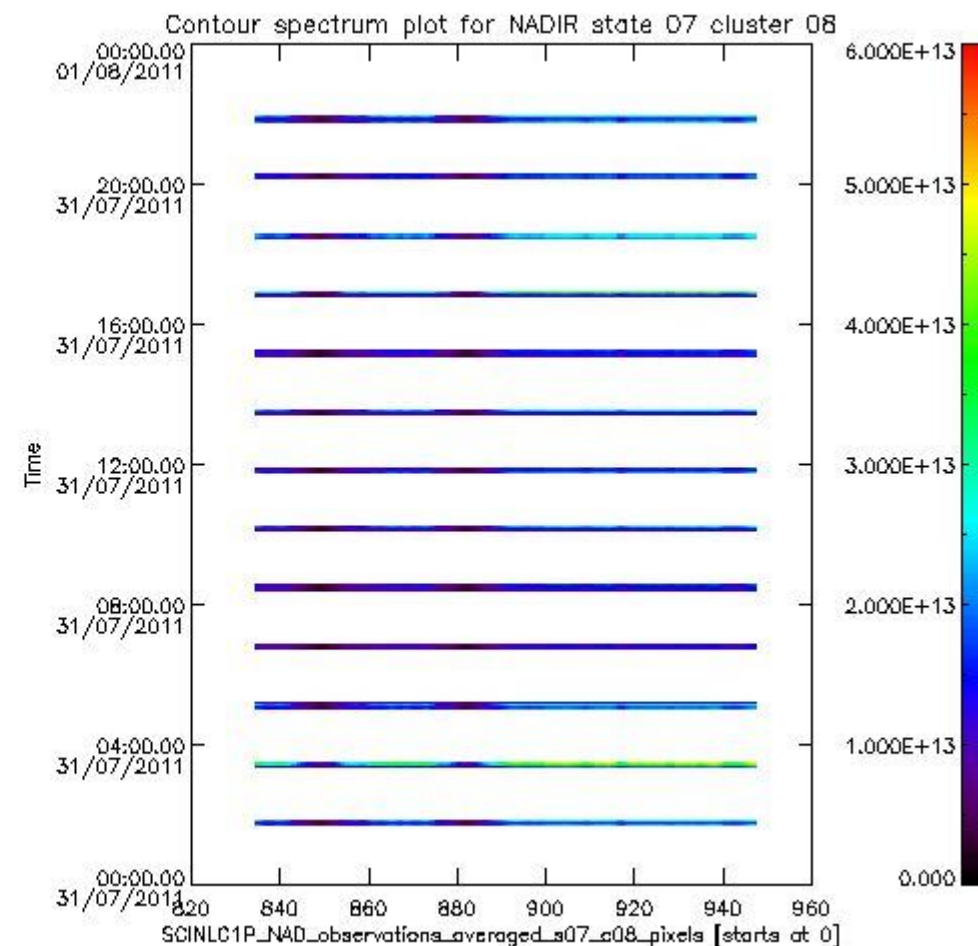
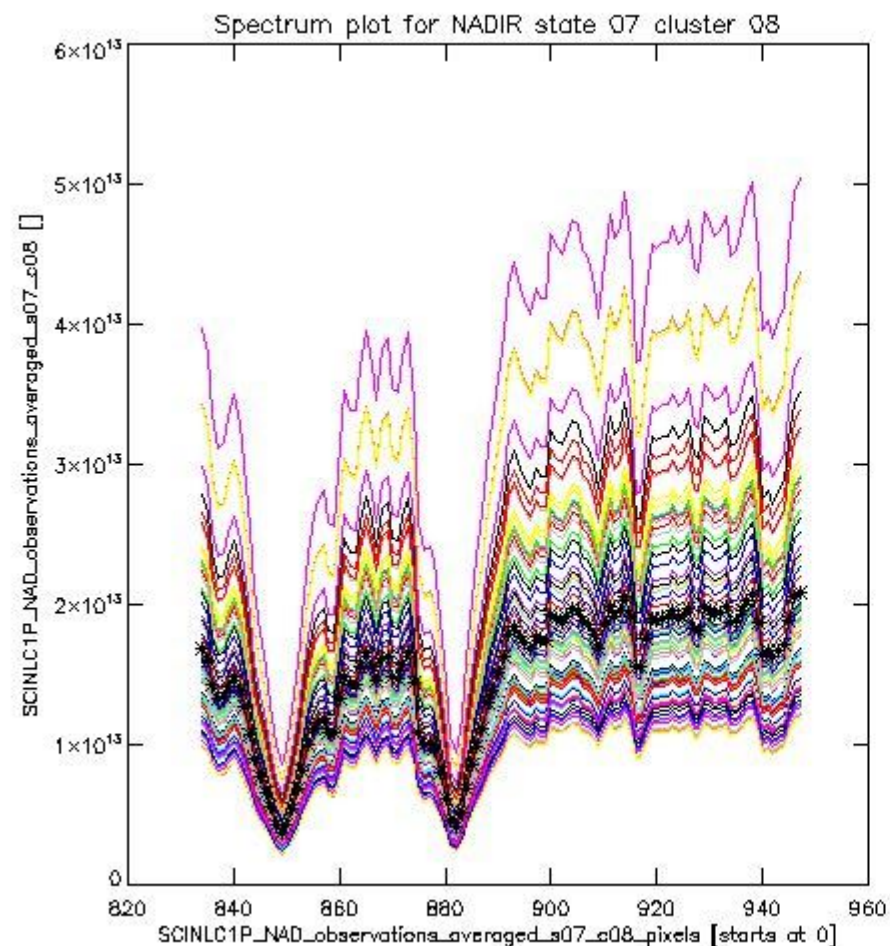
## 1.2 Source packet monitoring

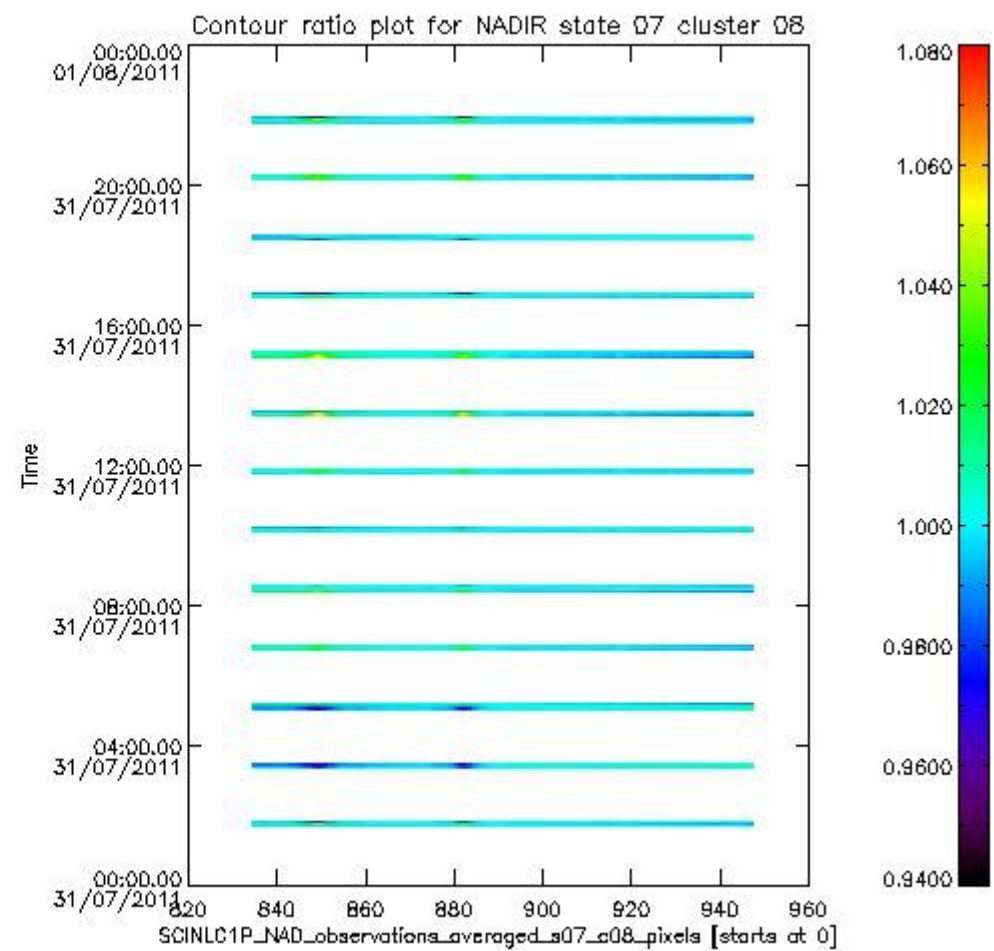
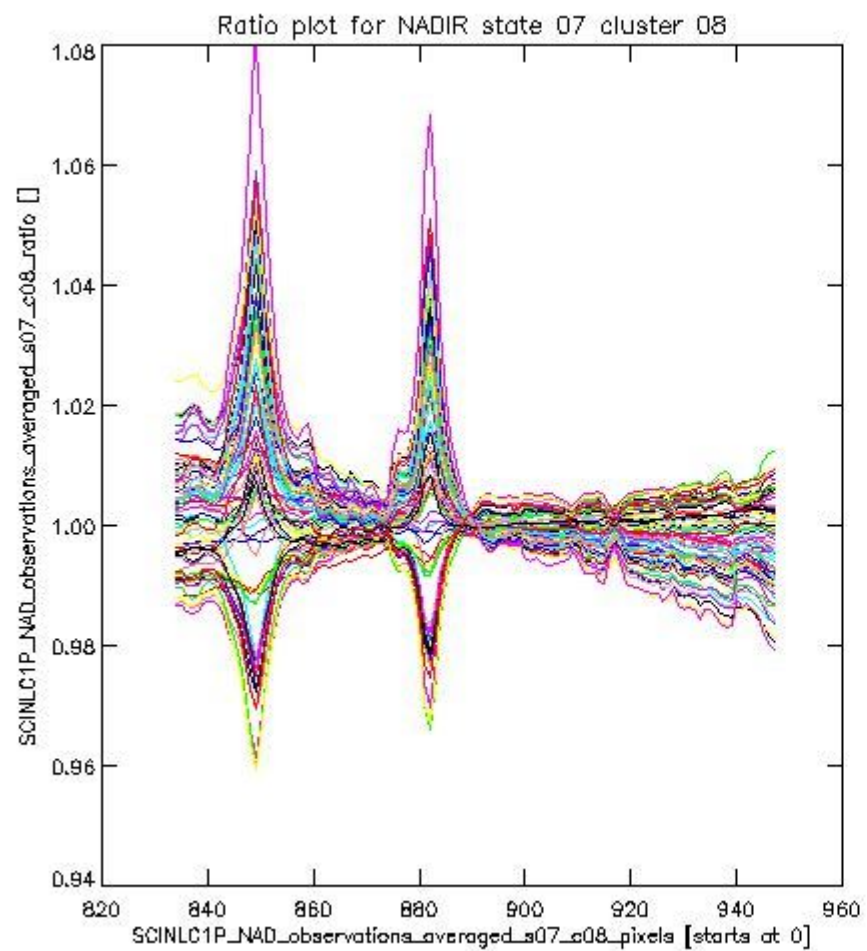
This section shows figures for each of the monitored source packet types listed in the Source Packet Summary section. For each mode-state-cluster(-height) combination the following plots are shown:

- A plot that shows all calibrated averaged spectra vs. pixel number as 2D-profiles. Each line is an average spectrum for a single state occurrence. For Limb modes, the average is performed on spectra recorded at a specific height. The reference spectrum that is used for comparison is also shown as a black line with \* markers.
- A plot that shows all calibrated averaged spectra vs. pixel number and time using a coloured contour plot. The colours indicate the intensity.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number. Each line is the ratio of a calibrated averaged spectrum and the reference spectrum, where both spectra have been intensity corrected (the spectrum has been divided by the average pixel intensity) prior to division.
- A plot that shows ratios of all calibrated averaged spectra and the reference spectrum vs. pixel number and time using a coloured contour plot.

### 1.2.1 NADIR state 07 cluster 08 The data for the analysis of NADIR state 07 cluster 08 have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:41:12.323
Start time of last sample	31JUL2011 21:54:17.321
Reference period start time	01JUL2011 01:40:46.270
Reference period stop time	30JUL2011 19:10:40.246
Channel number	2
First pixel number (starts at 0)	834
Last pixel number (starts at 0)	947

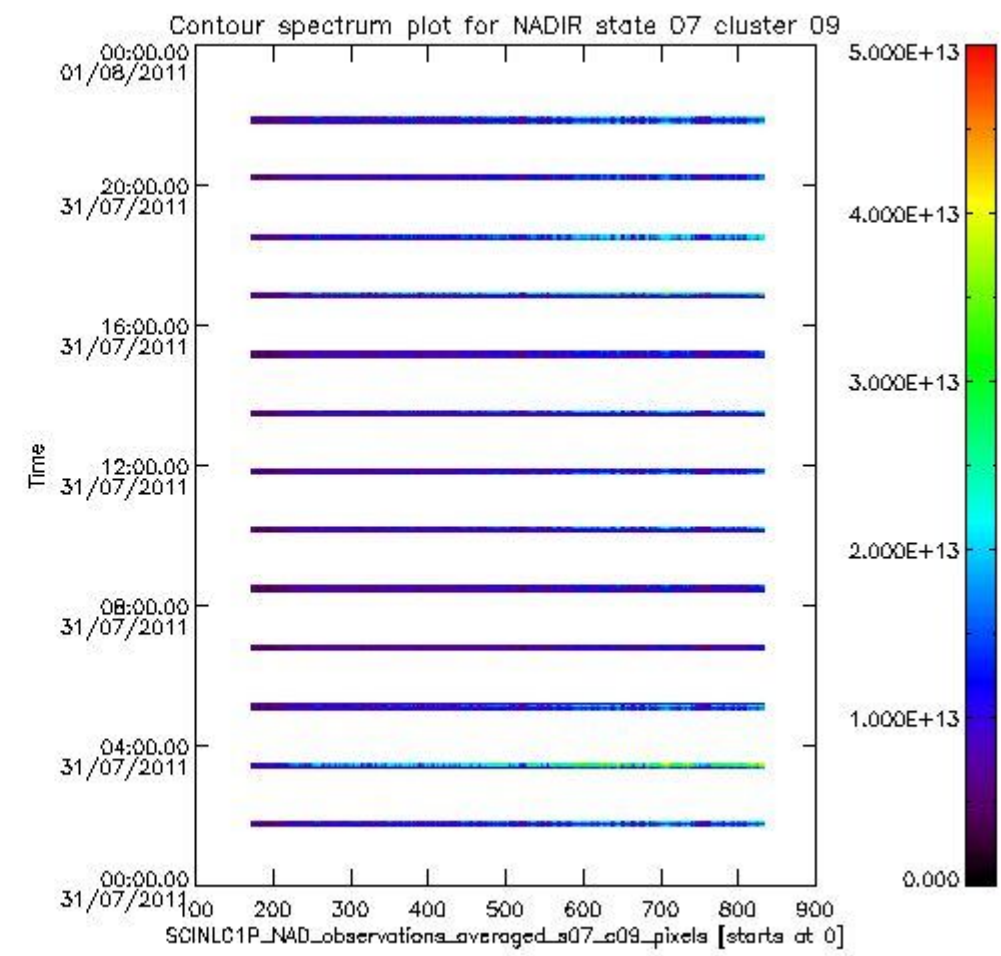
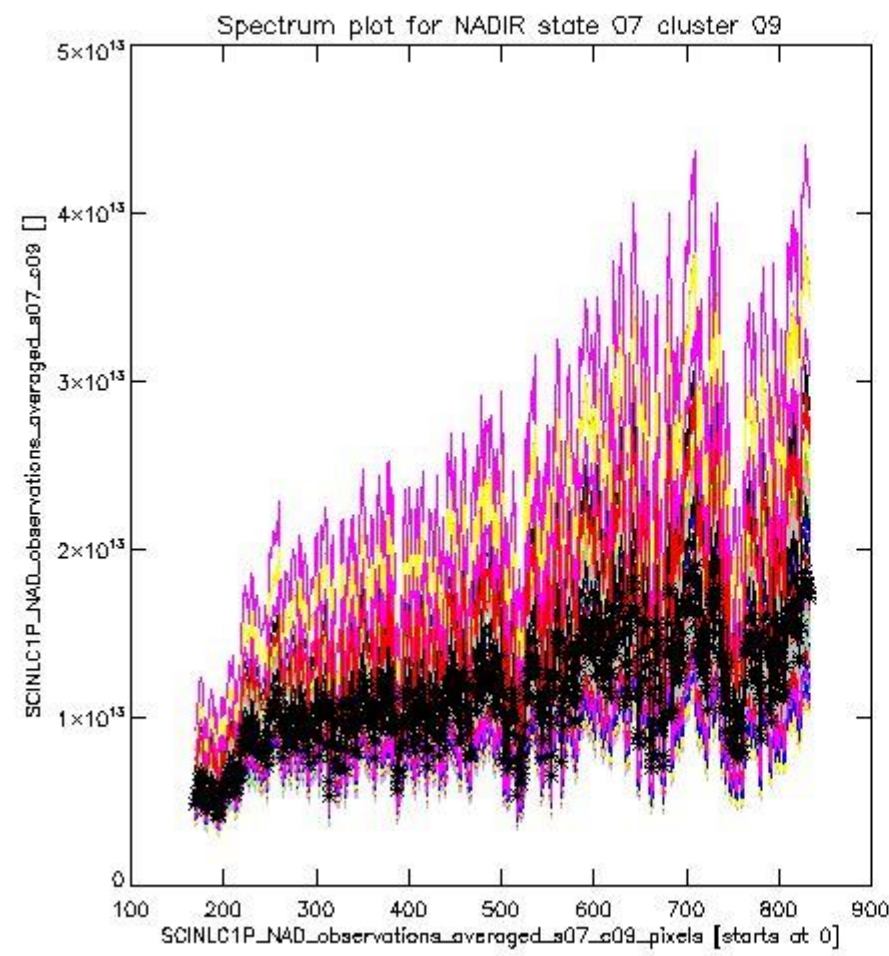




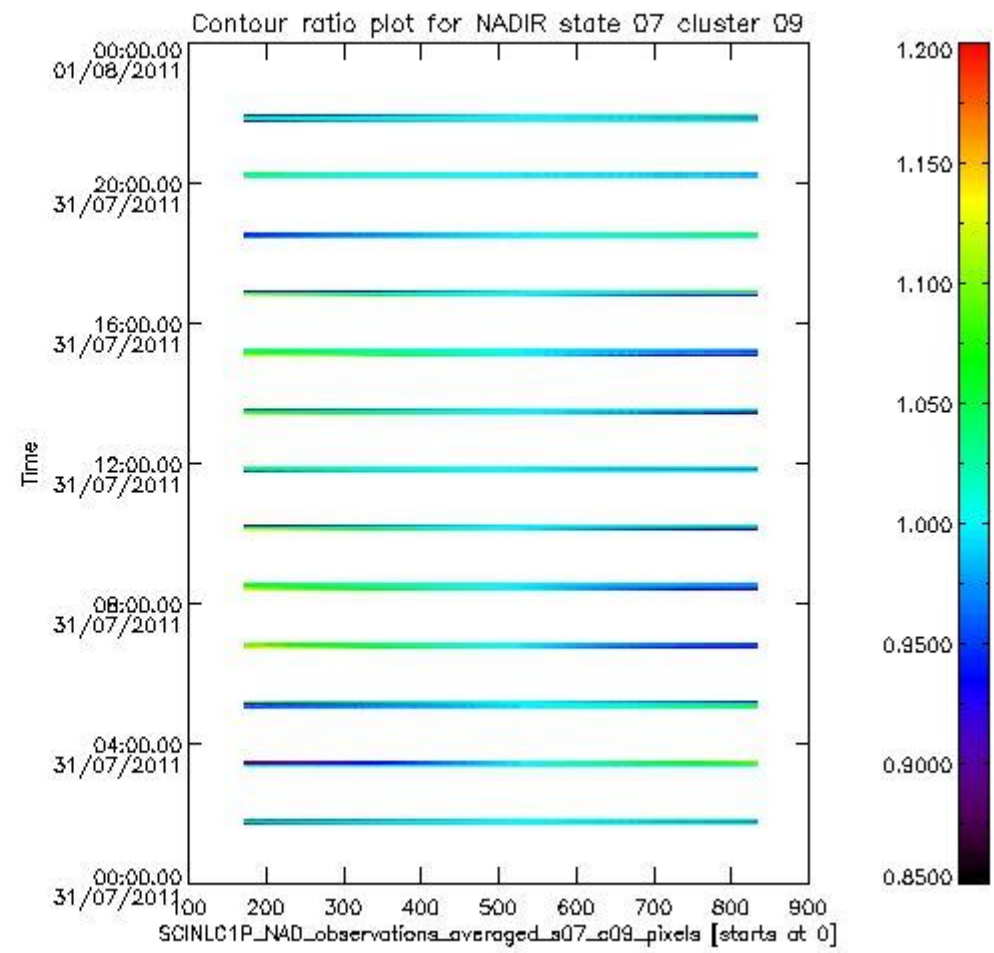
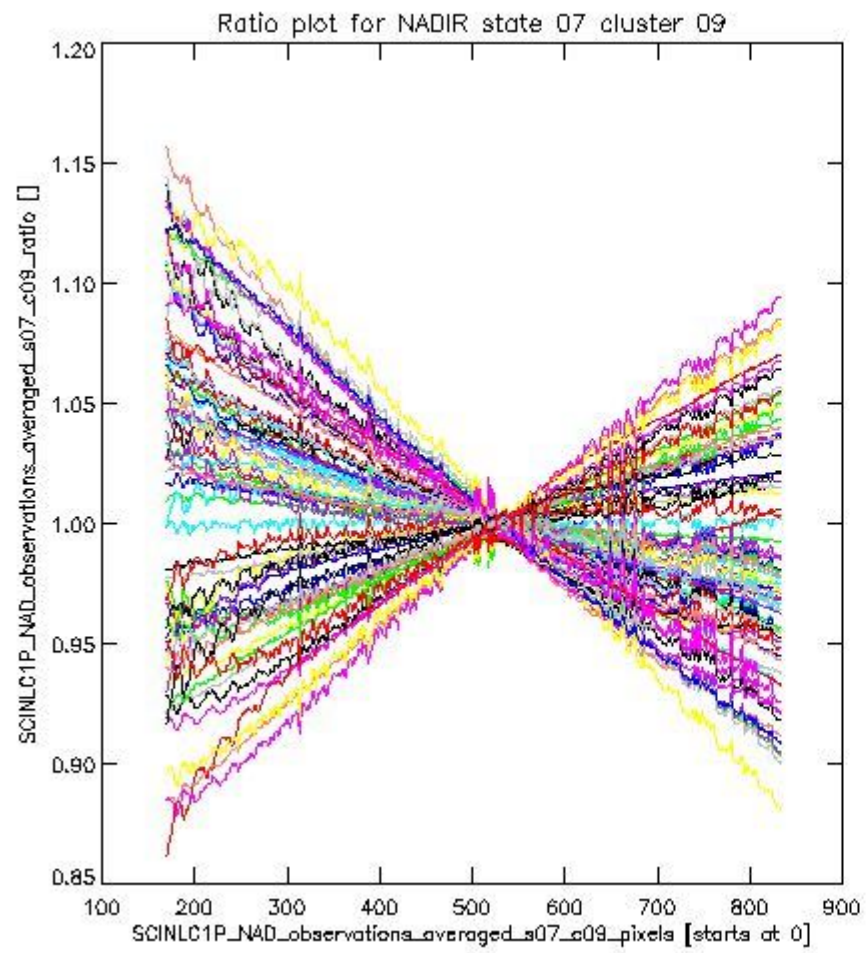
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_1.PNG

**1.2.2 NADIR state 07 cluster 09** The data for the analysis of NADIR state 07 cluster 09 have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:41:12.323
Start time of last sample	31JUL2011 21:54:17.321
Reference period start time	01JUL2011 01:40:46.270
Reference period stop time	30JUL2011 19:10:40.246
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	833



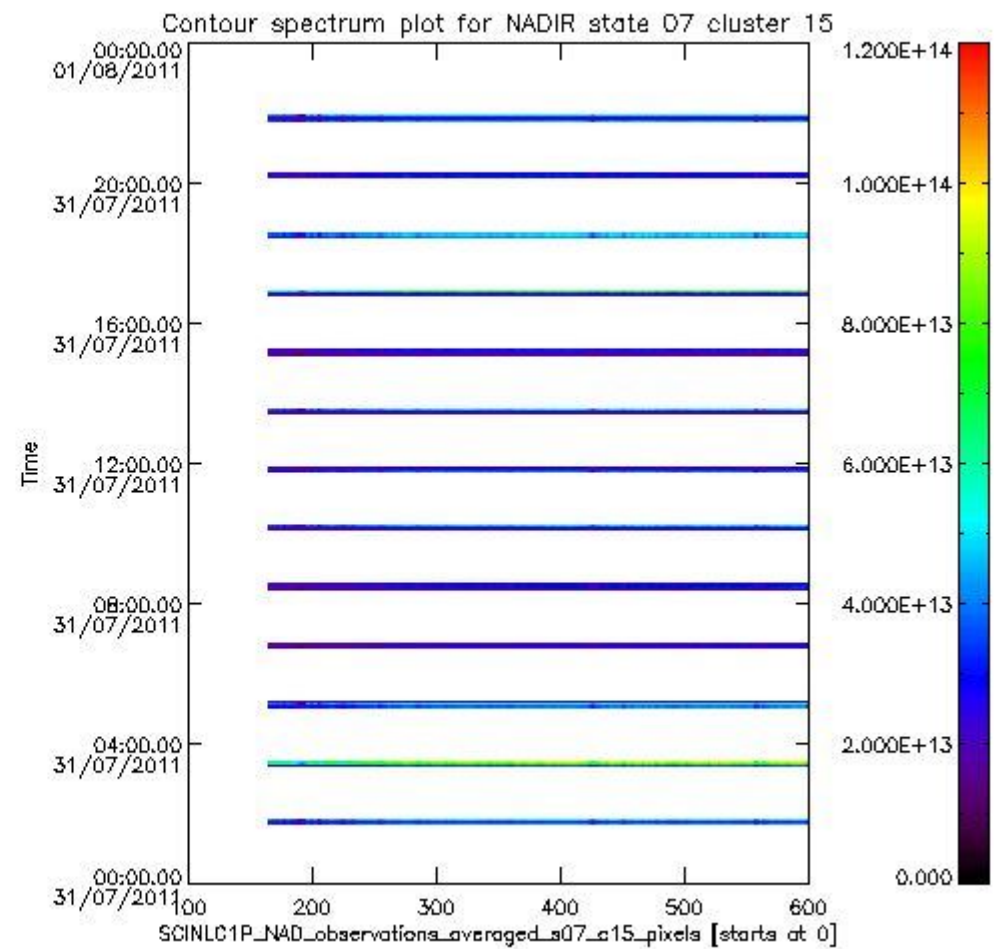
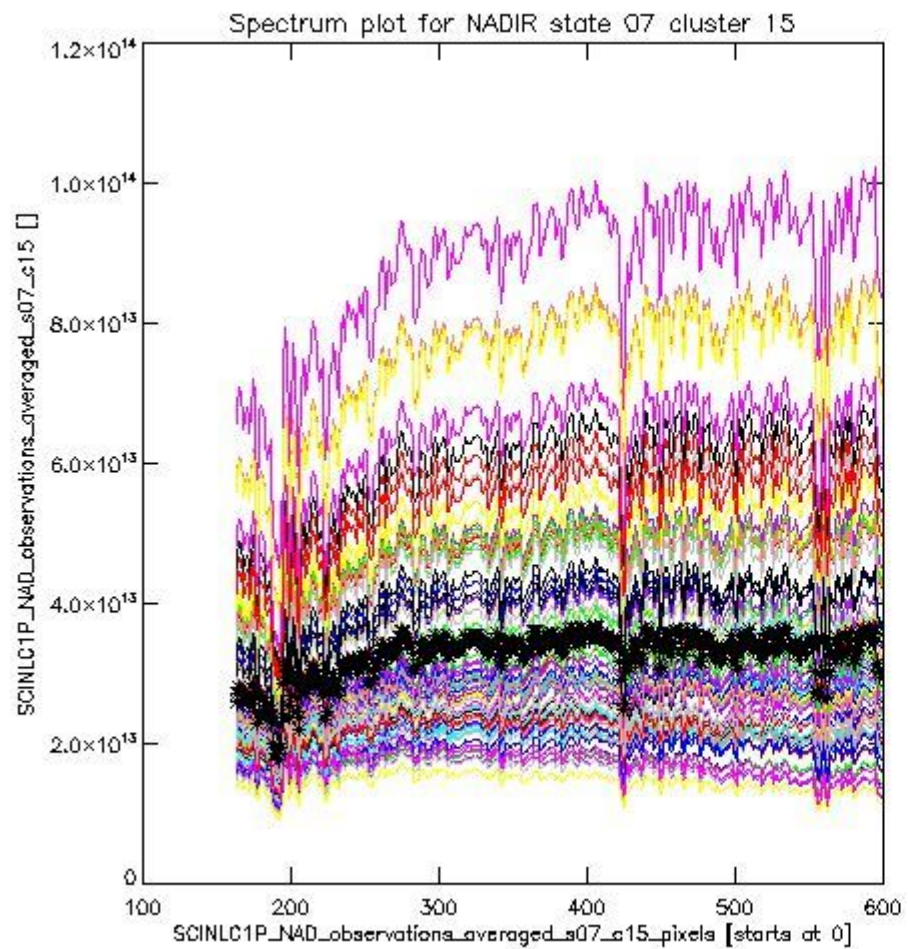
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_2.PNG



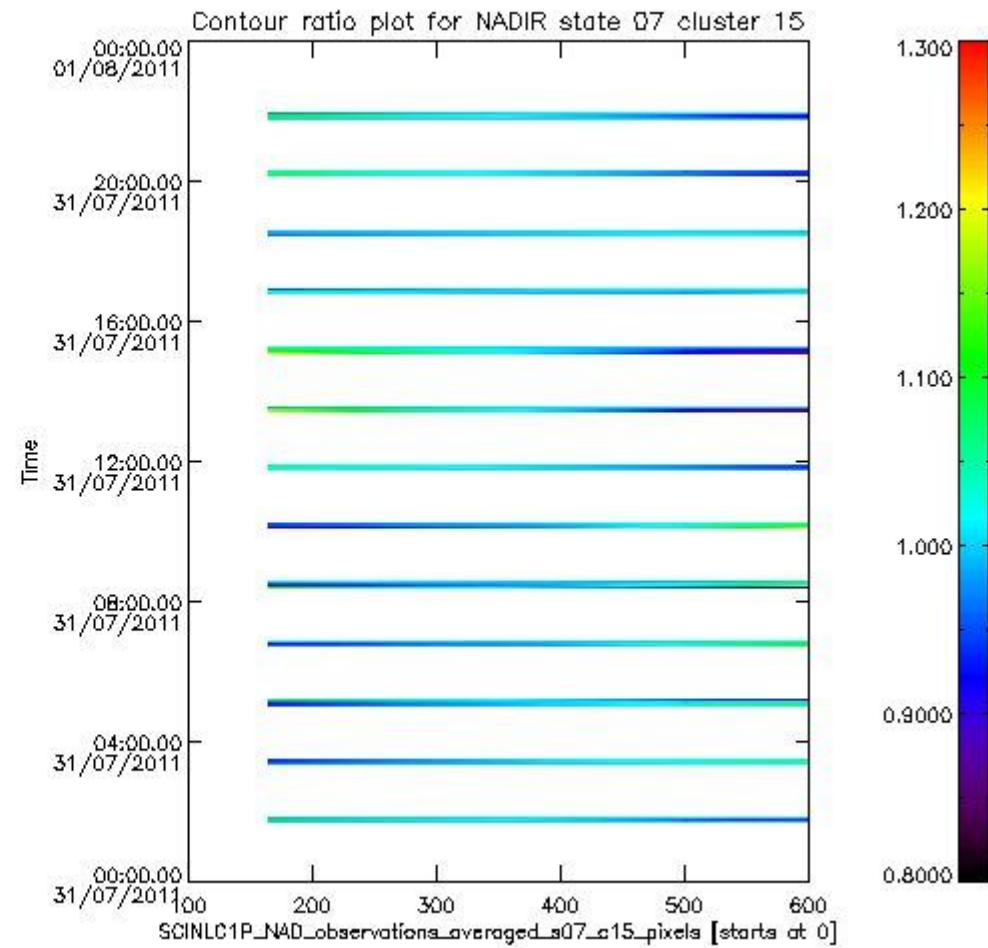
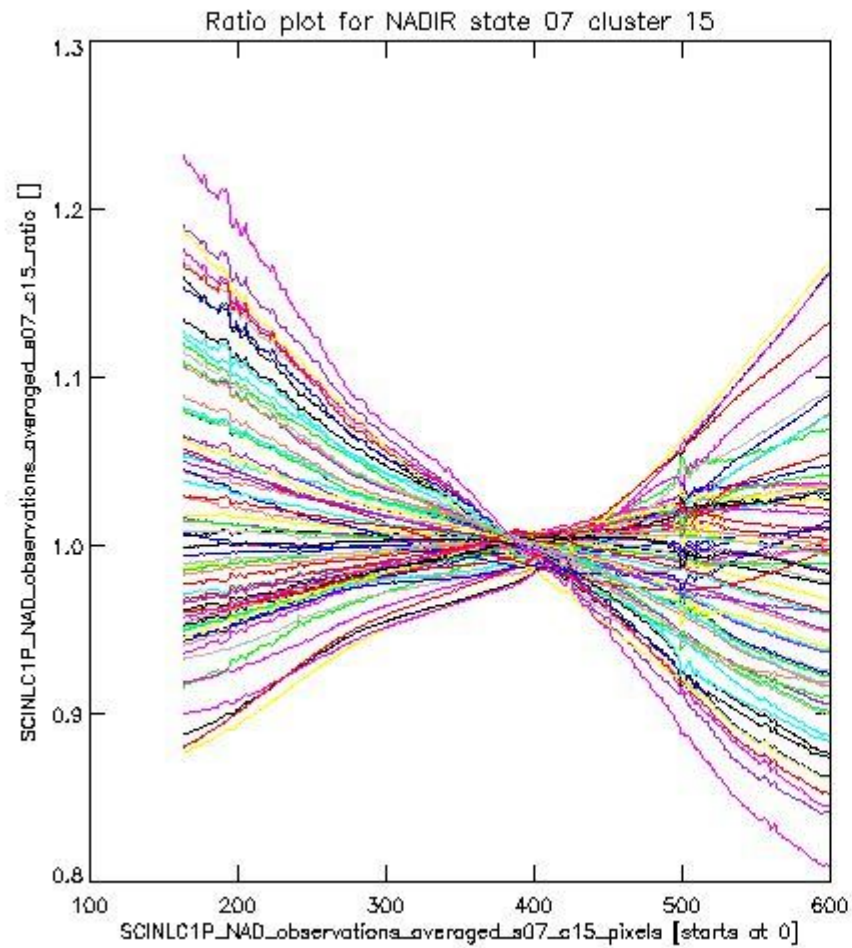
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_3.PNG

**1.2.3 NADIR state 07 cluster 15** The data for the analysis of NADIR state 07 cluster 15 have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:41:12.323
Start time of last sample	31JUL2011 21:54:17.321
Reference period start time	01JUL2011 01:40:46.270
Reference period stop time	30JUL2011 19:10:40.246
Channel number	3
First pixel number (starts at 0)	163
Last pixel number (starts at 0)	598



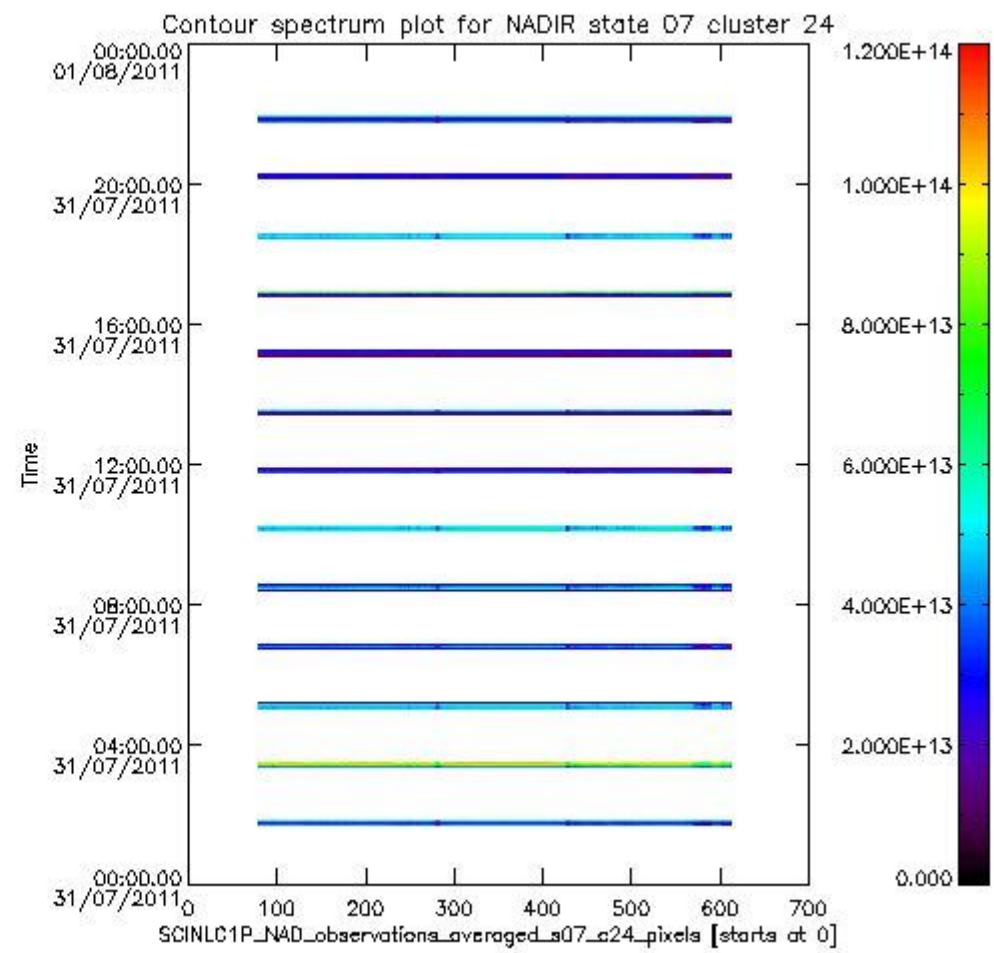
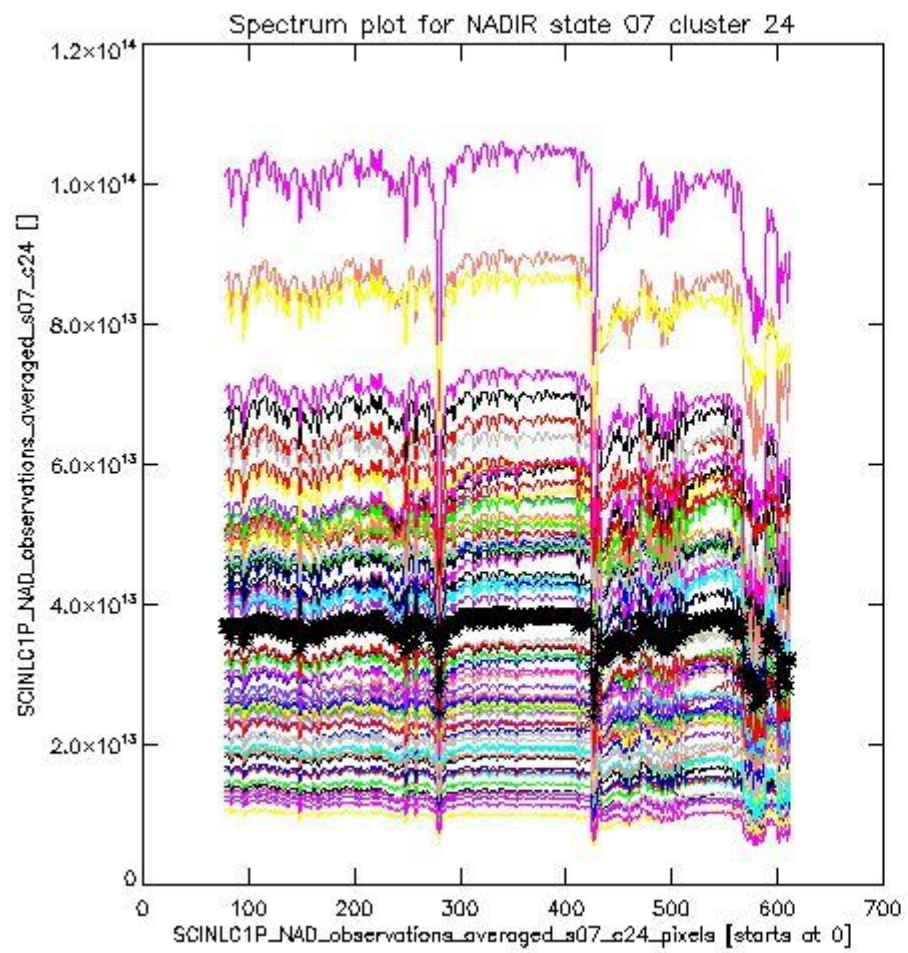
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_4.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_5.PNG

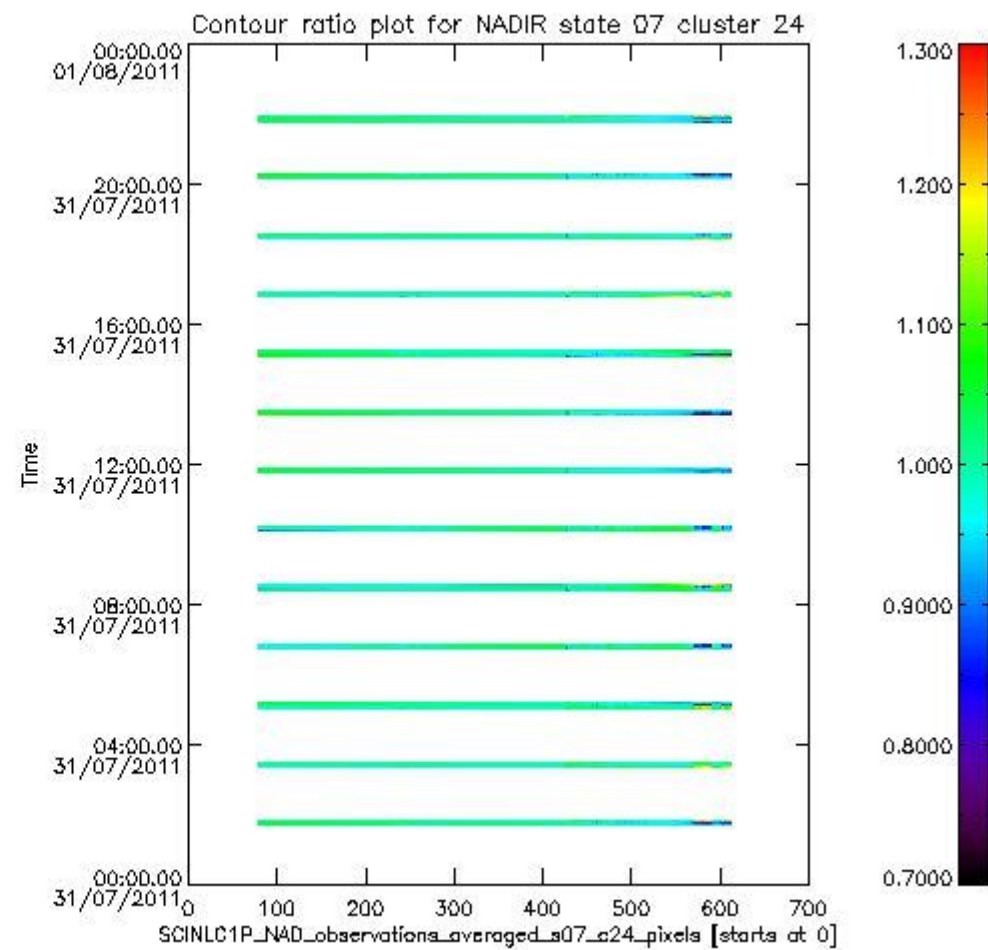
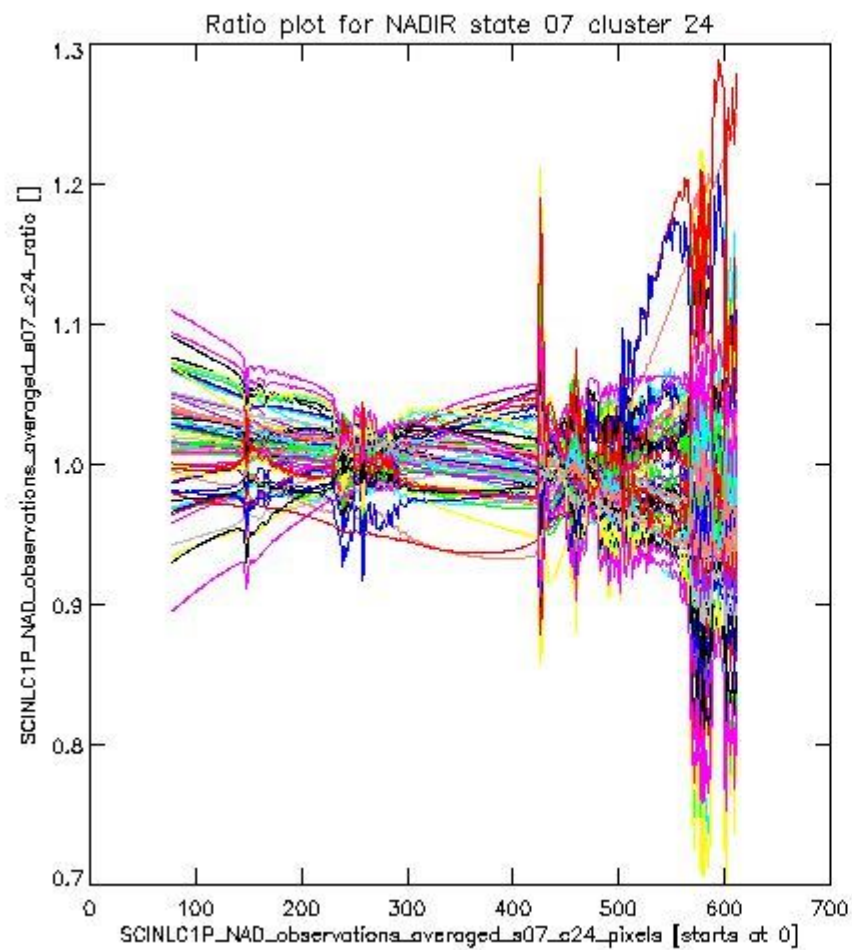
**1.2.4 NADIR state 07 cluster 24** The data for the analysis of NADIR state 07 cluster 24 have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:41:12.323
Start time of last sample	31JUL2011 21:54:17.321
Reference period start time	01JUL2011 01:40:46.270
Reference period stop time	30JUL2011 19:10:40.246
Channel number	4
First pixel number (starts at 0)	78
Last pixel number (starts at 0)	612



sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_6.PNG

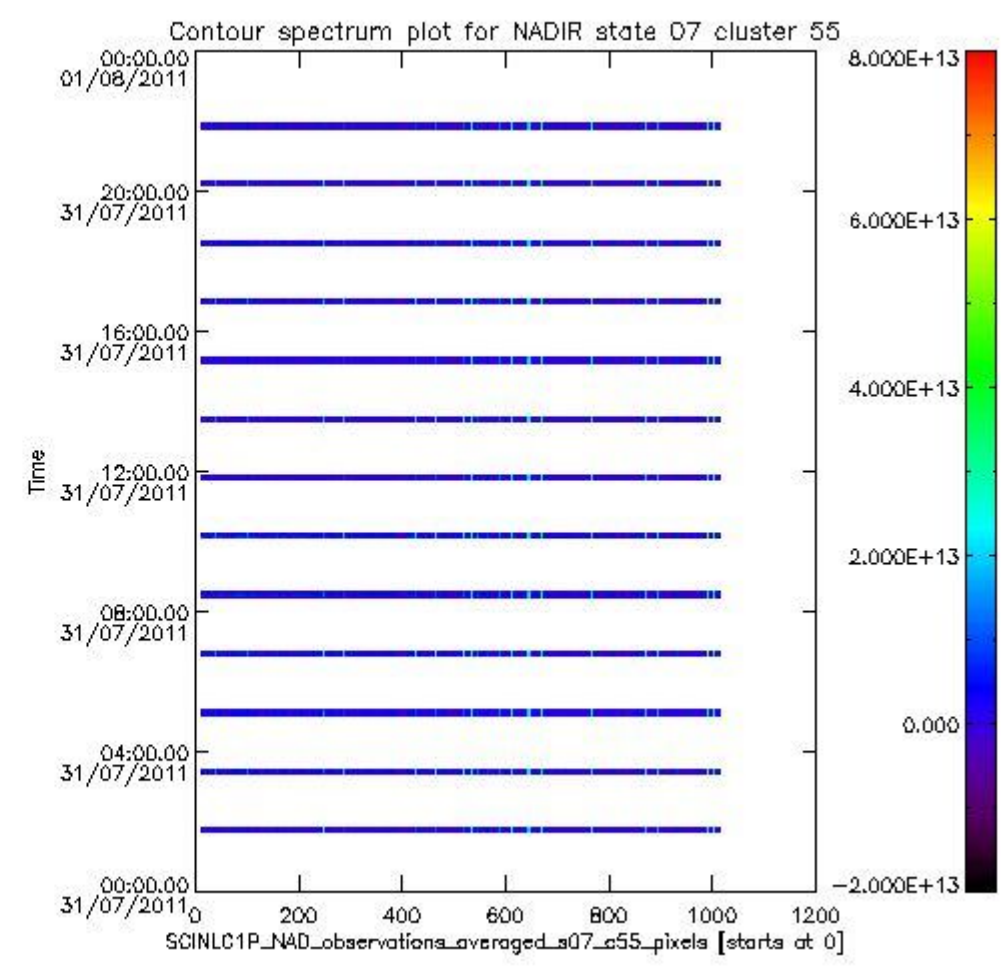
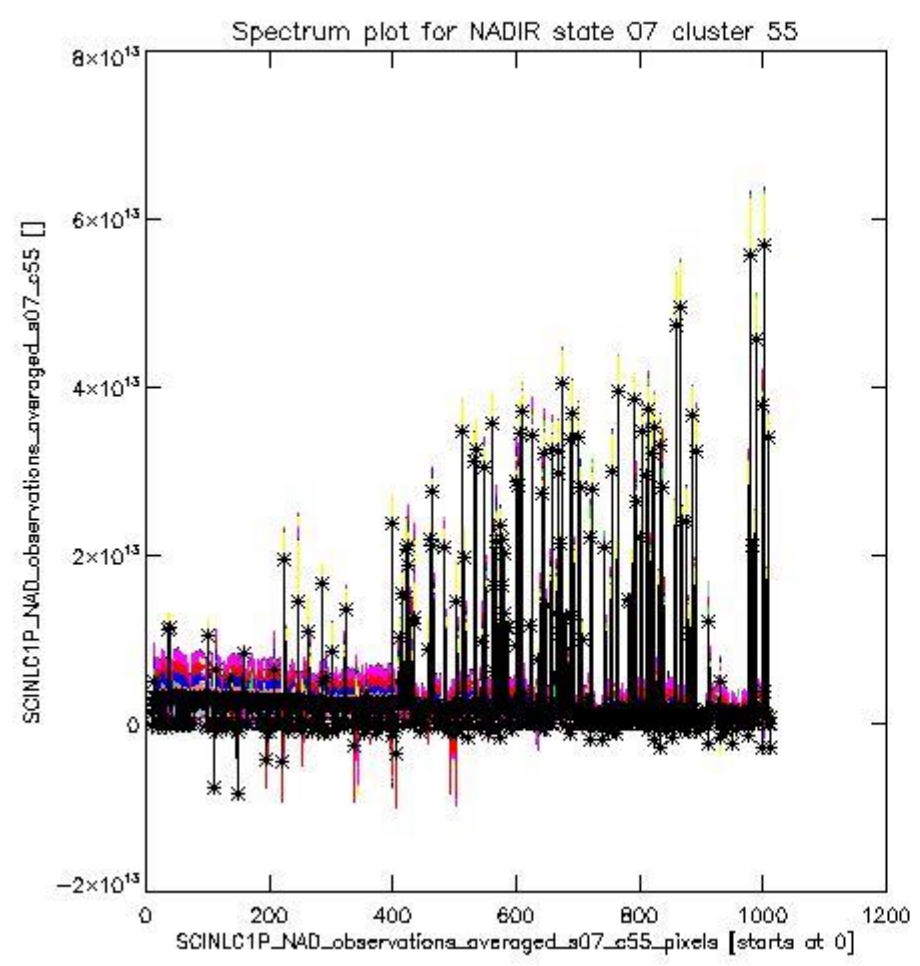




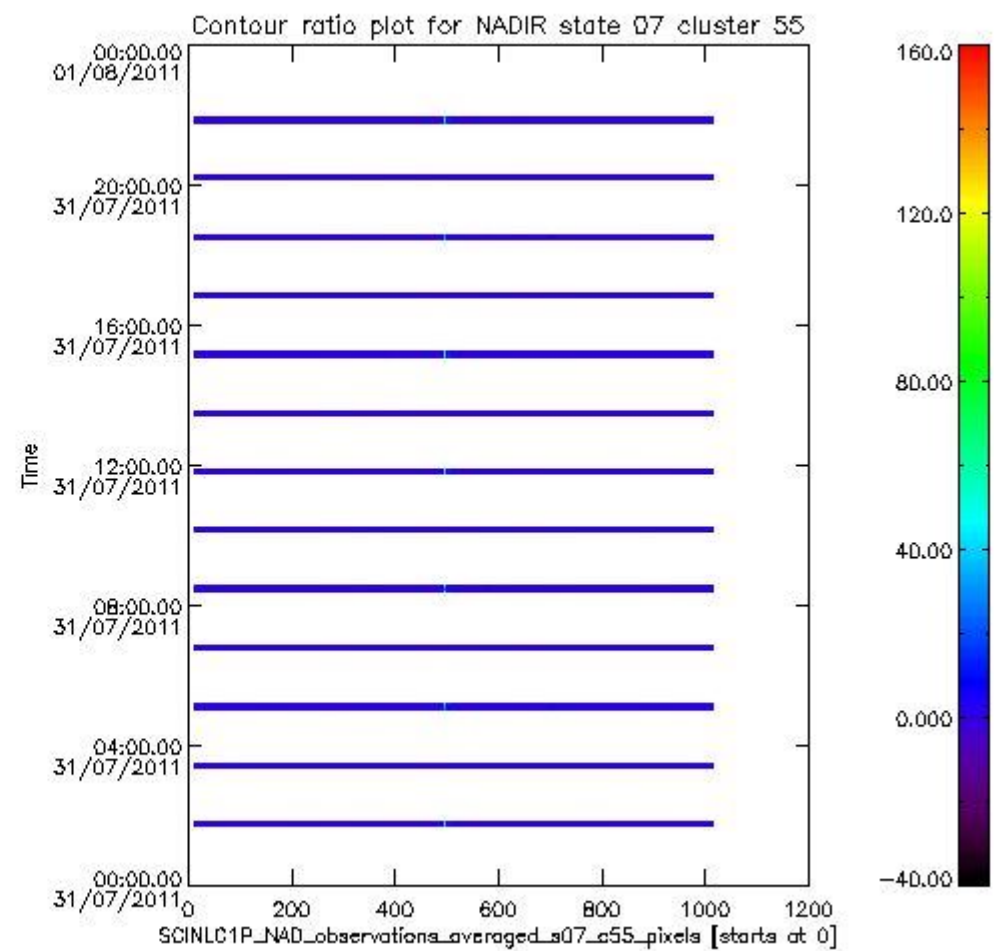
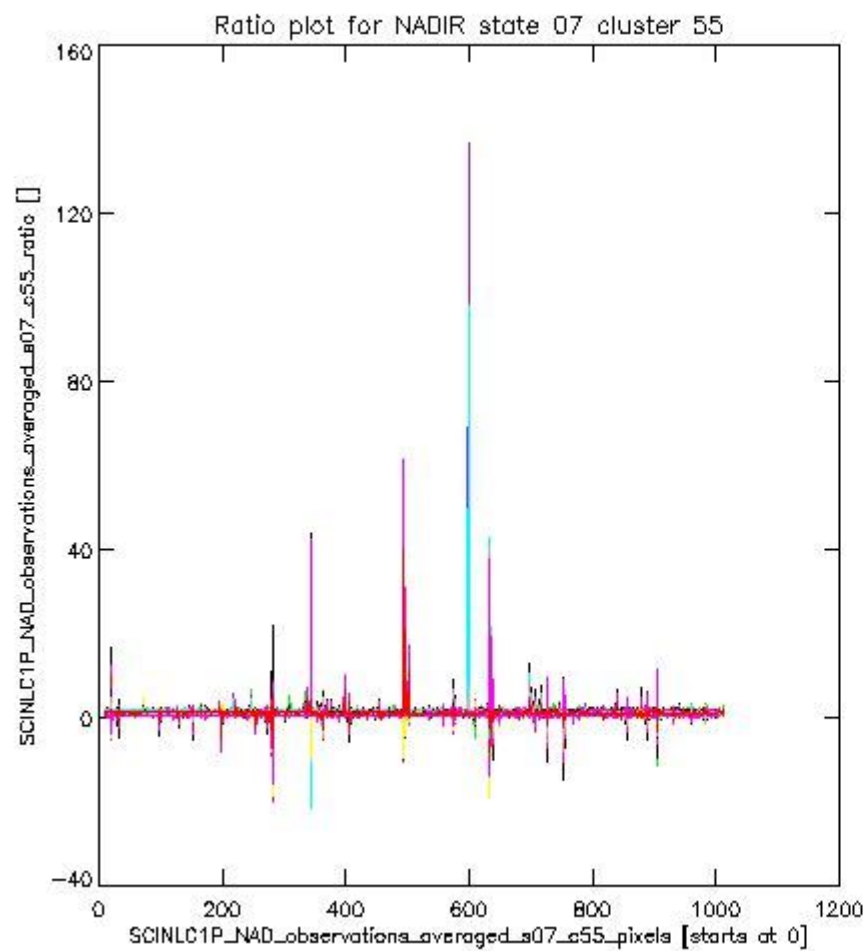
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_7.PNG

**1.2.5 NADIR state 07 cluster 55** The data for the analysis of NADIR state 07 cluster 55 have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:41:12.323
Start time of last sample	31JUL2011 21:54:17.321
Reference period start time	01JUL2011 01:40:46.270
Reference period stop time	30JUL2011 19:10:40.246
Channel number	8
First pixel number (starts at 0)	10
Last pixel number (starts at 0)	1013



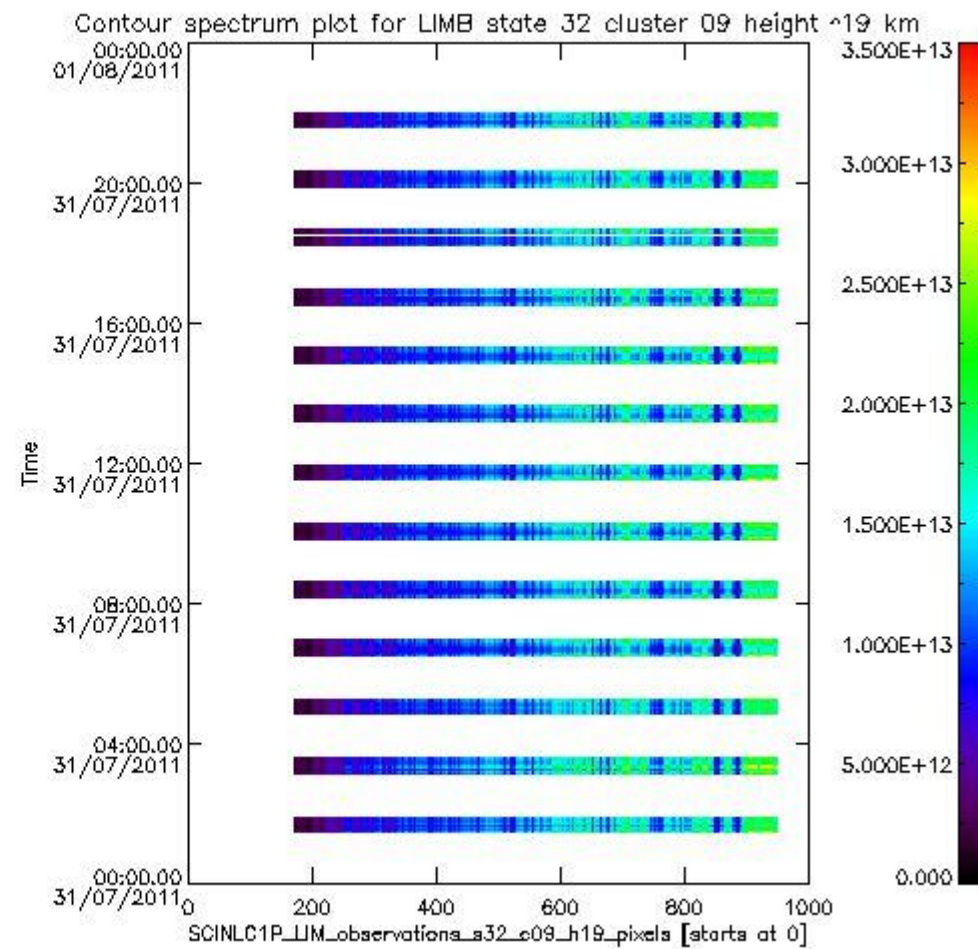
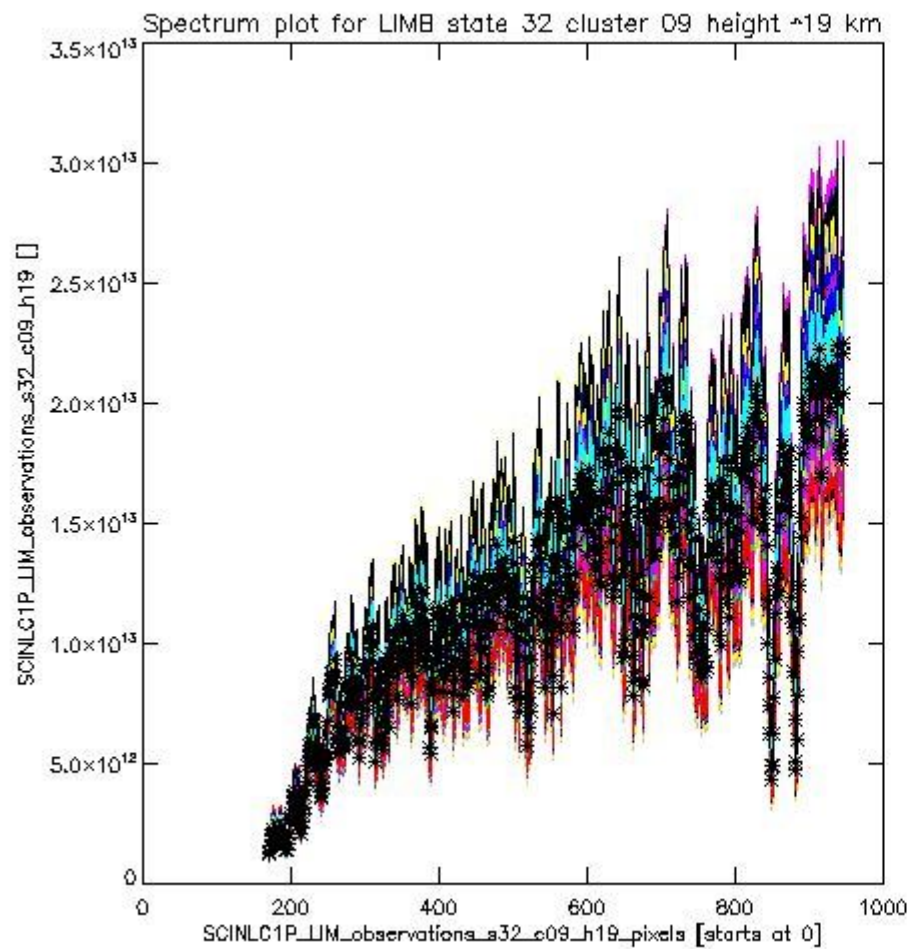
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_8.PNG



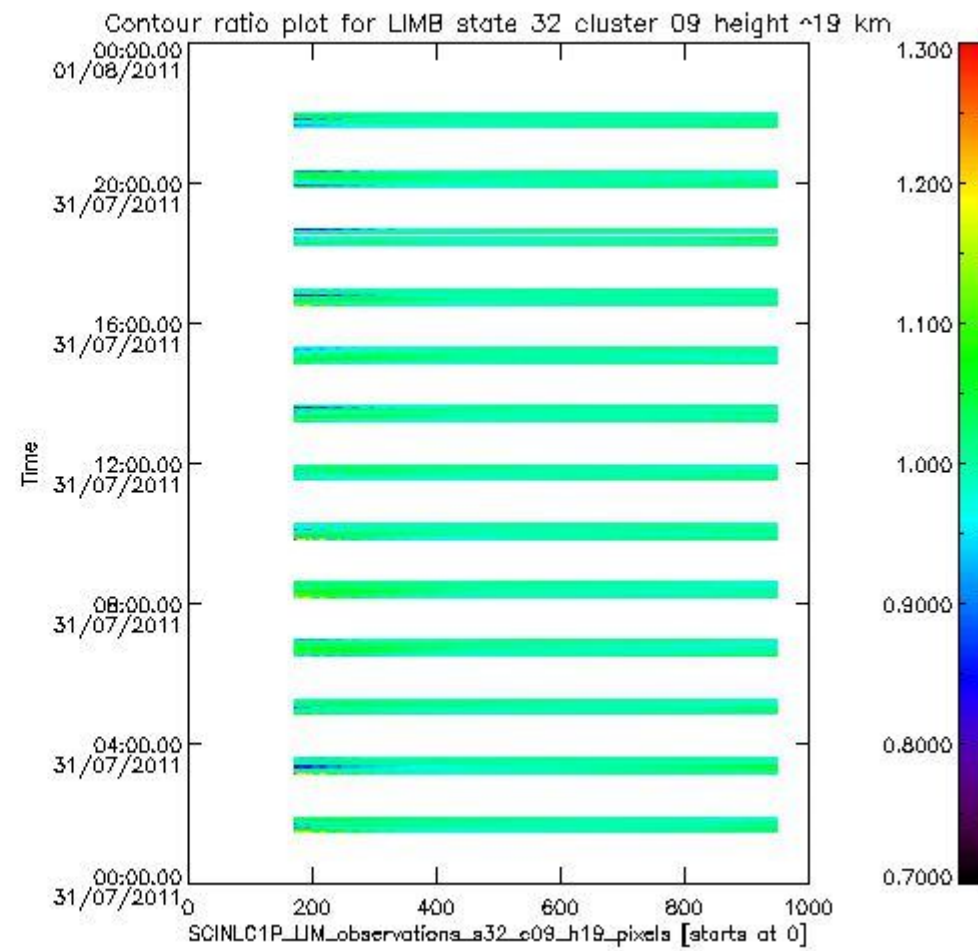
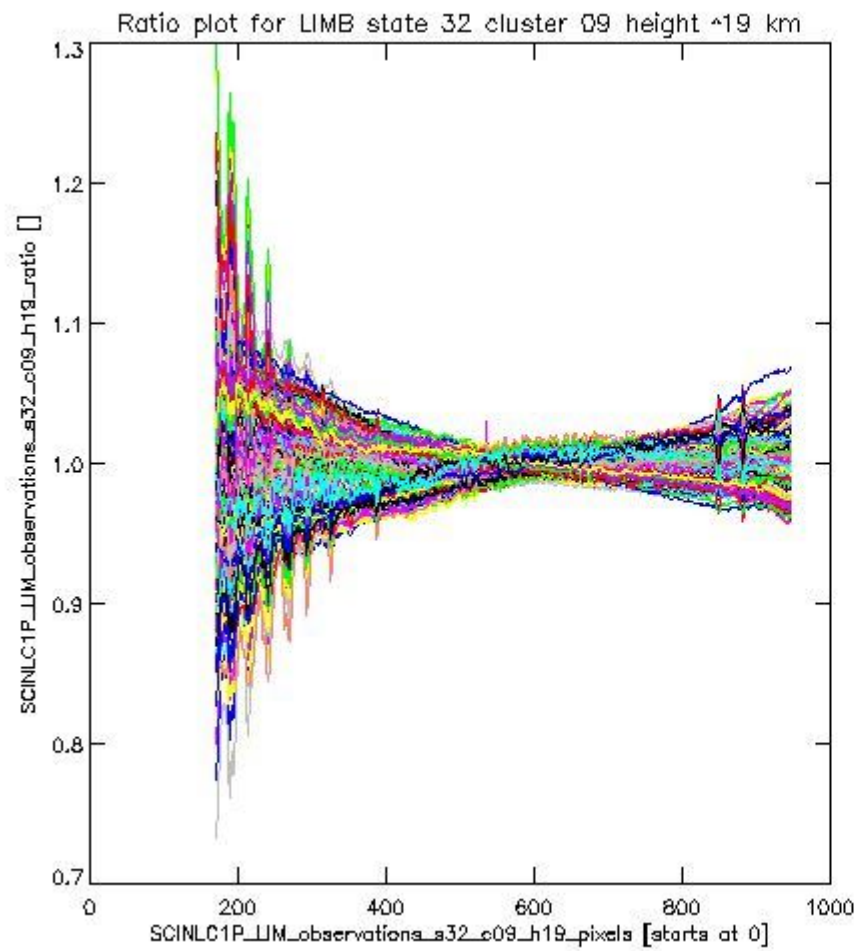
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_9.PNG

**1.2.6 LIMB state 32 cluster 09 height ~19 km** The data for the analysis of LIMB state 32 cluster 09 height ~19 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



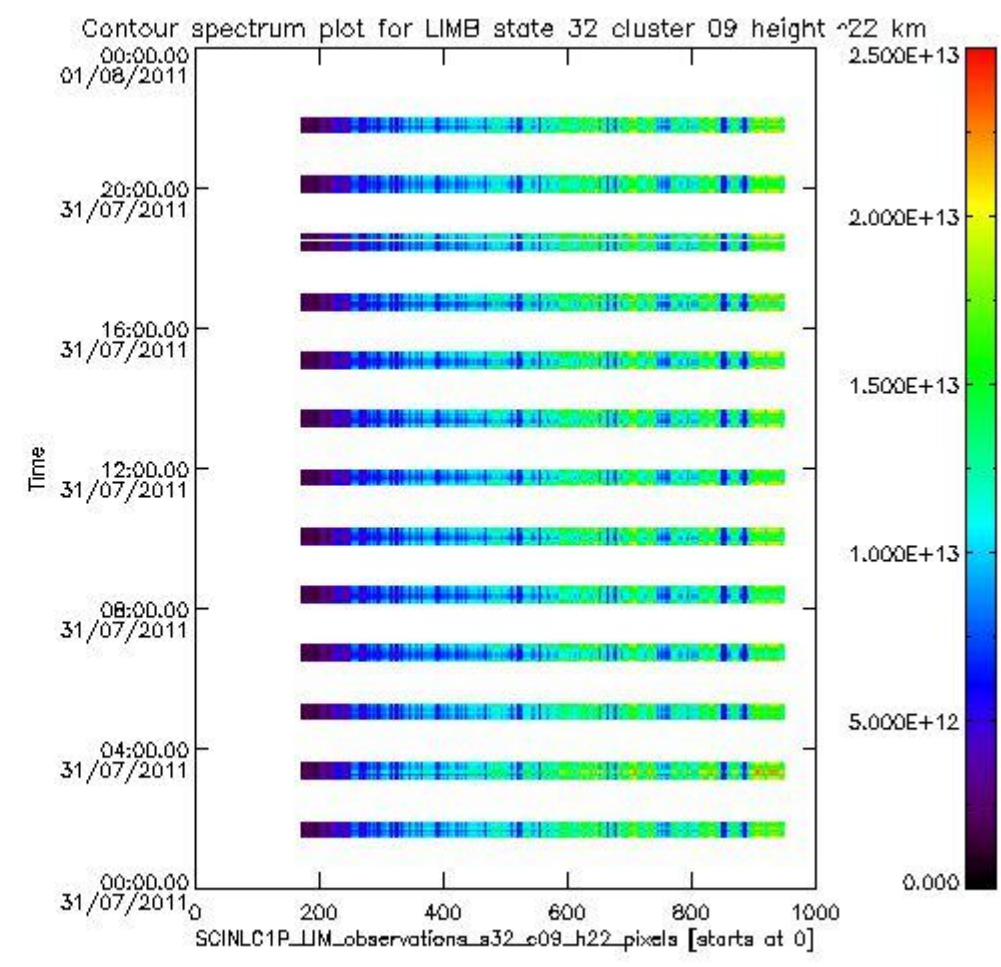
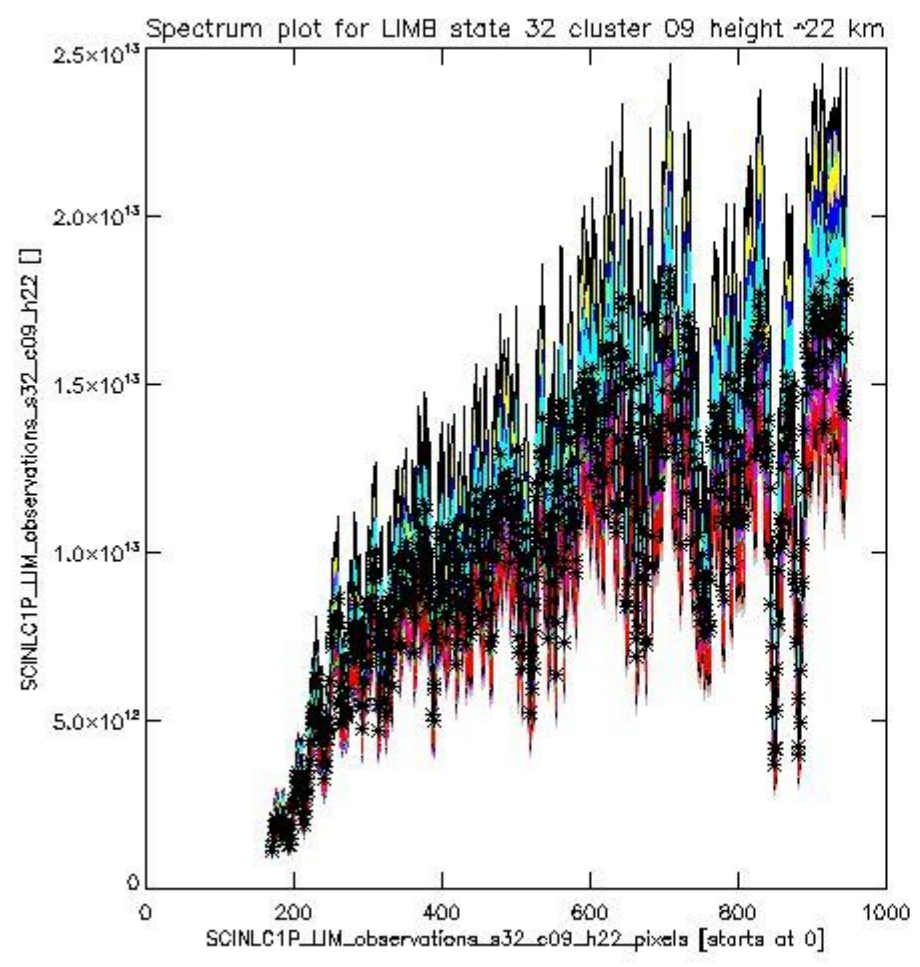
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_10.PNG



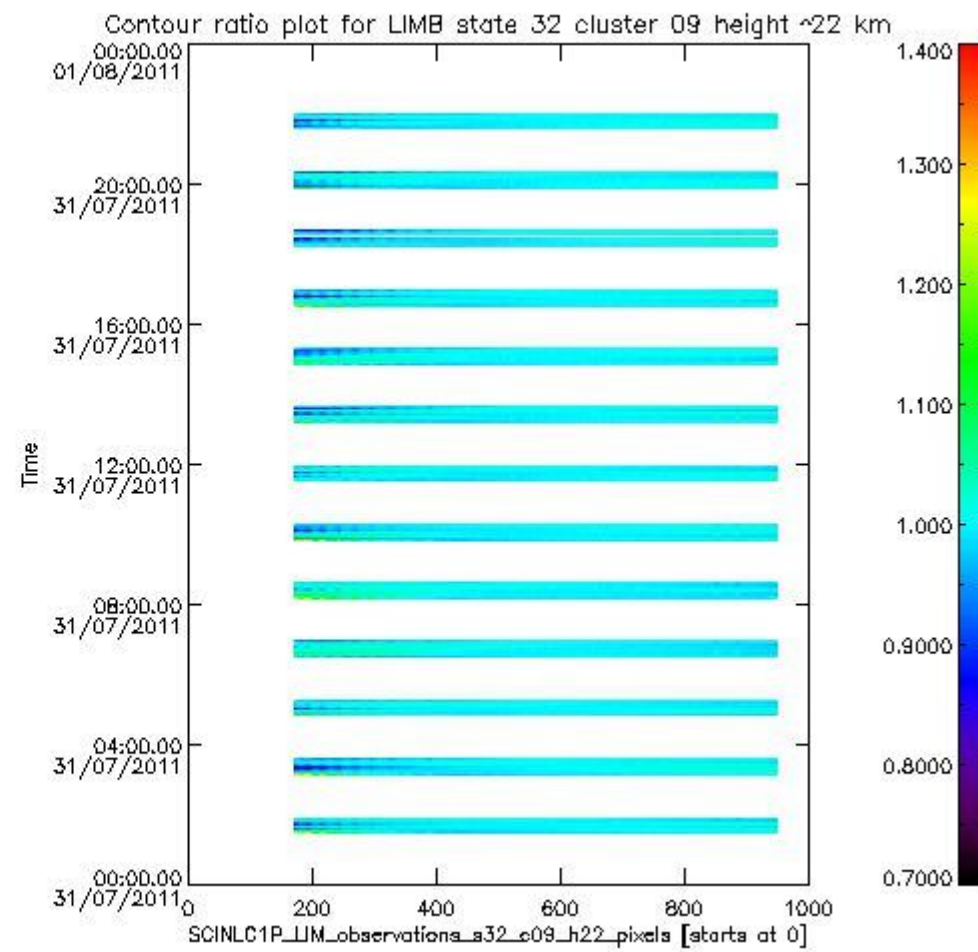
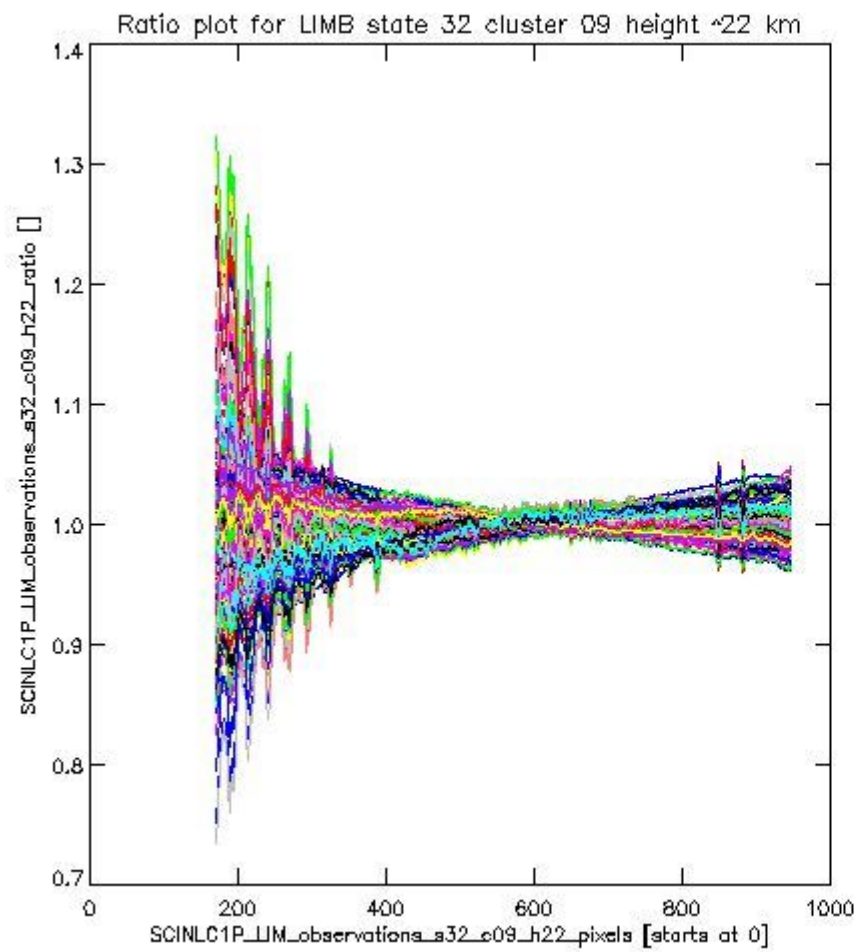
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_11.PNG

**1.2.7 LIMB state 32 cluster 09 height ~22 km** The data for the analysis of LIMB state 32 cluster 09 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



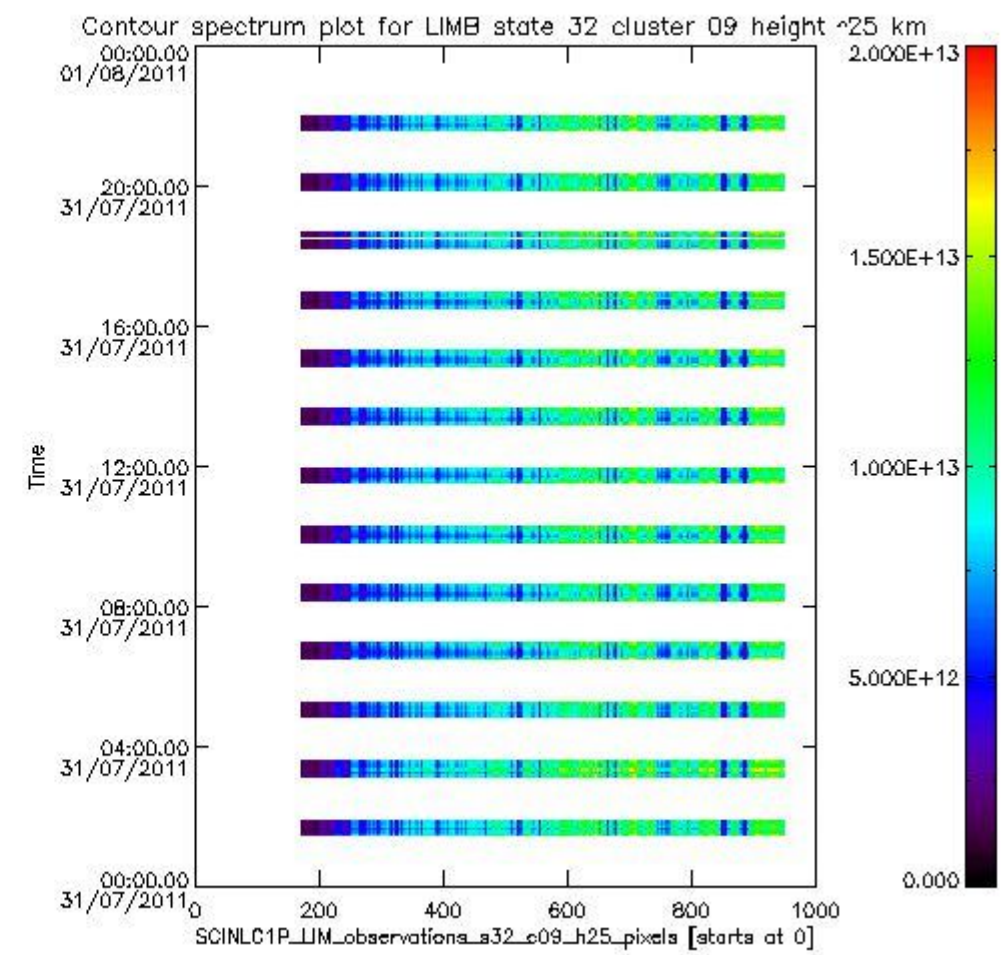
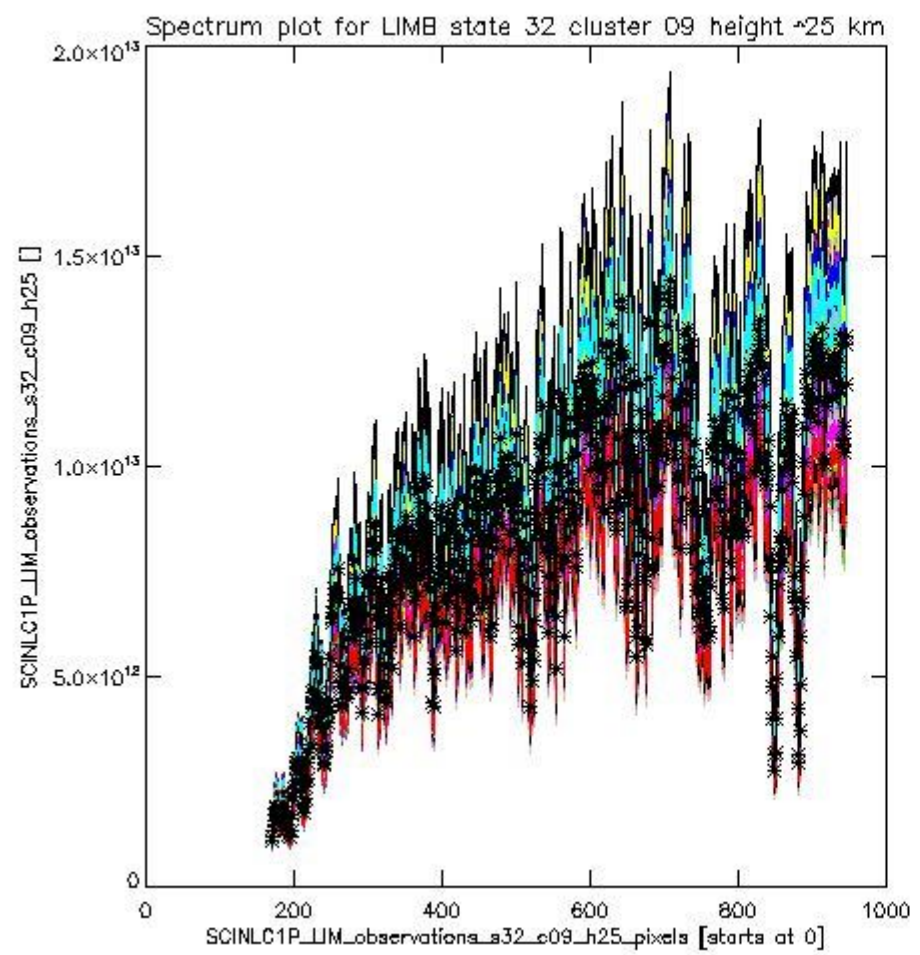
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_12.PNG



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_13.PNG

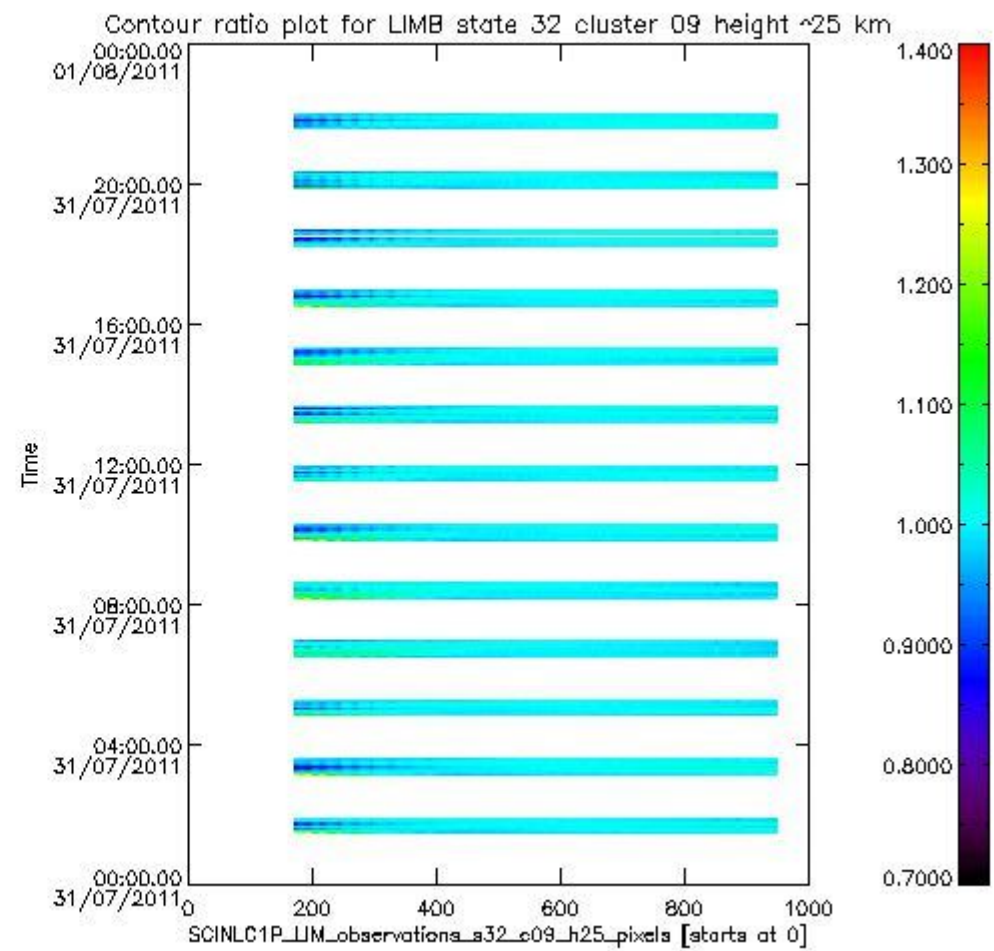
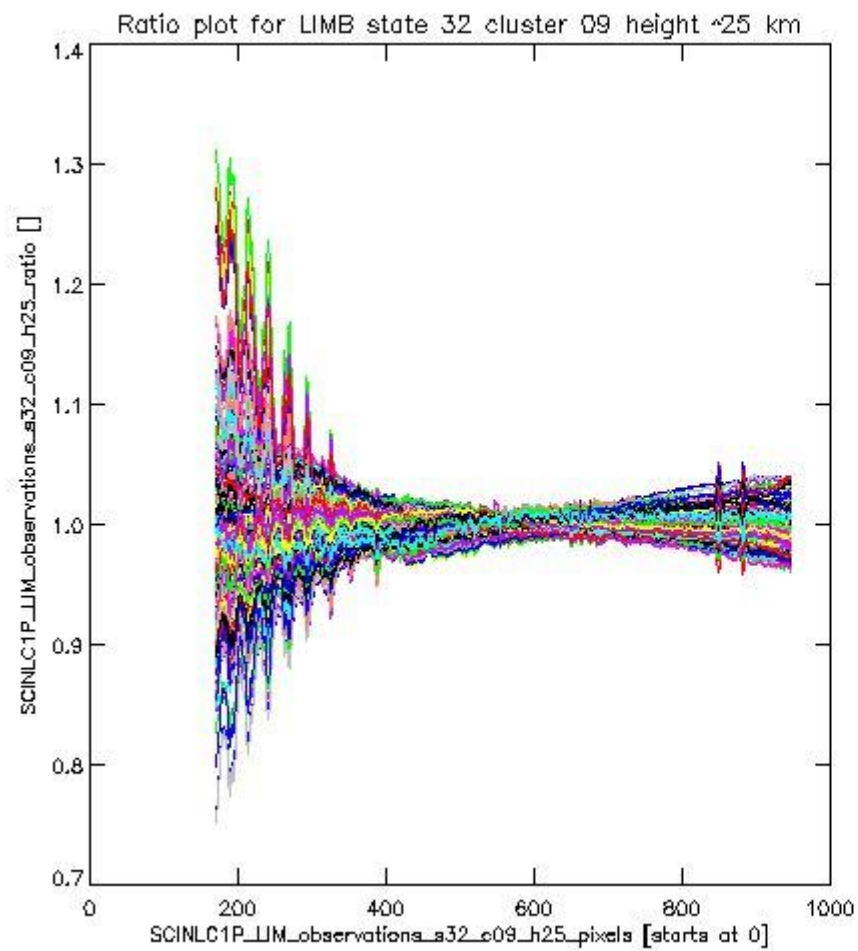
**1.2.8 LIMB state 32 cluster 09 height ~25 km** The data for the analysis of LIMB state 32 cluster 09 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	2
First pixel number (starts at 0)	170
Last pixel number (starts at 0)	947



sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_14.PNG

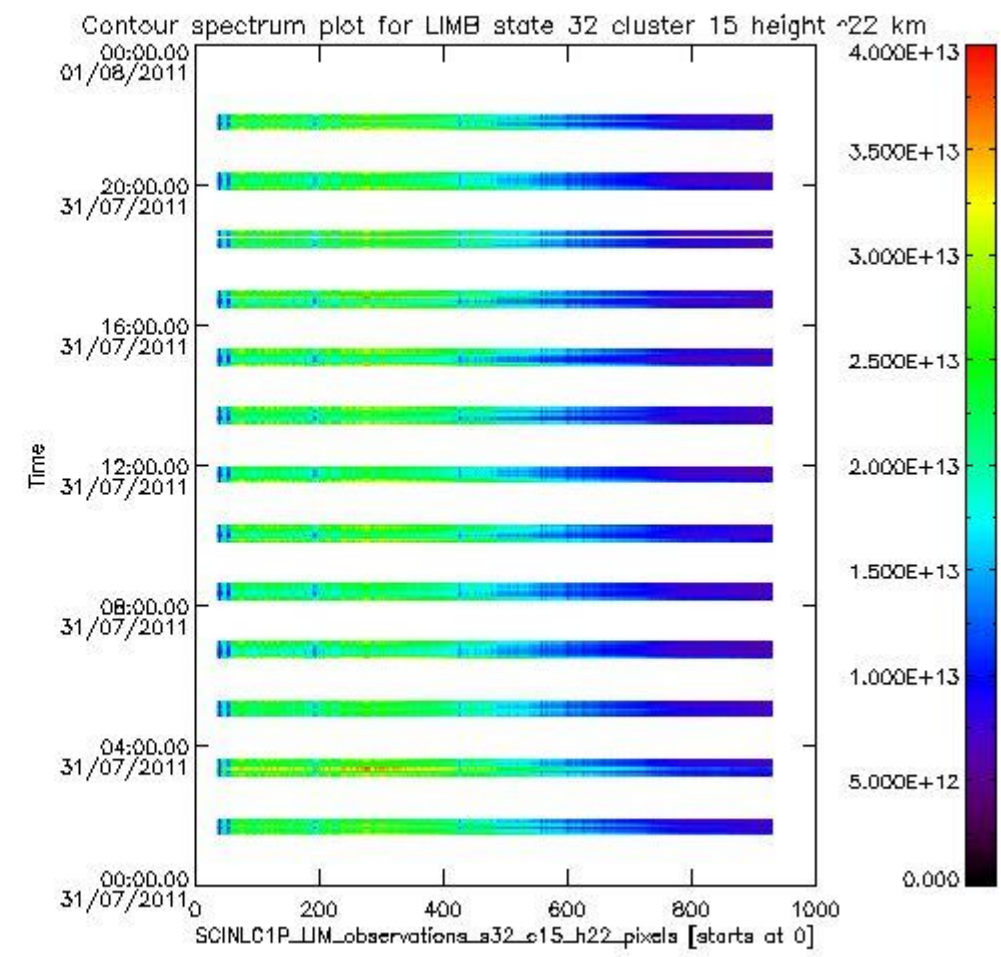
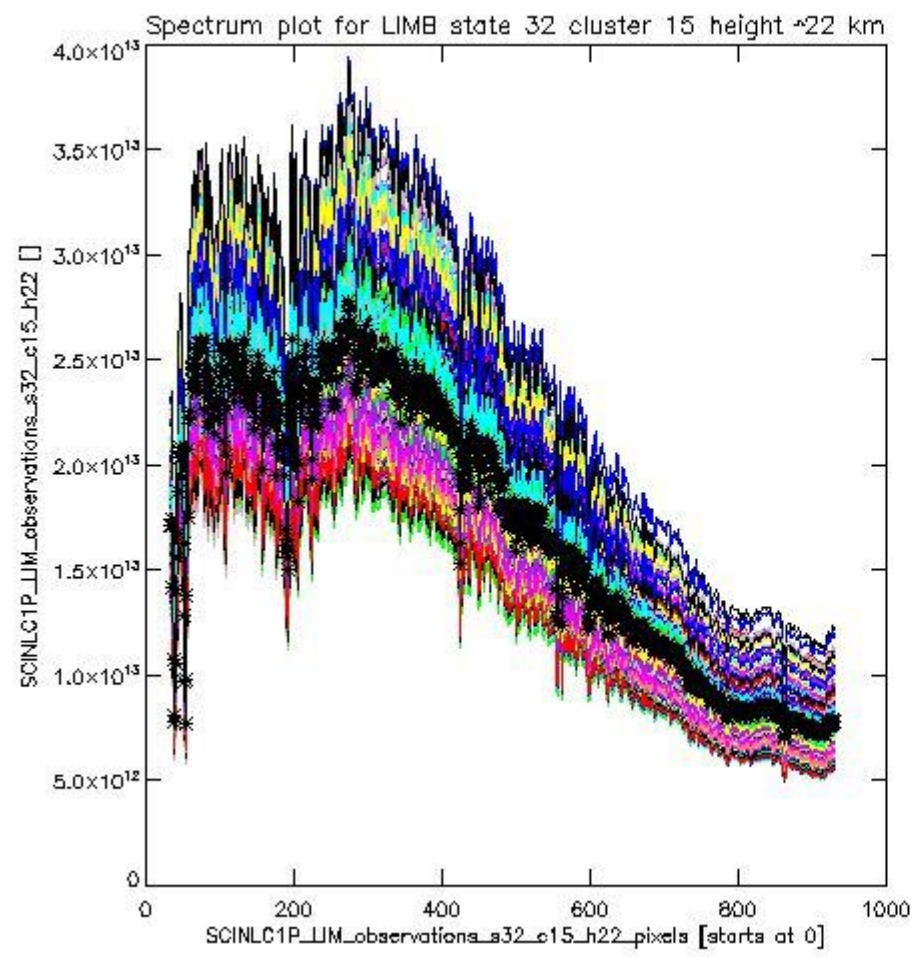




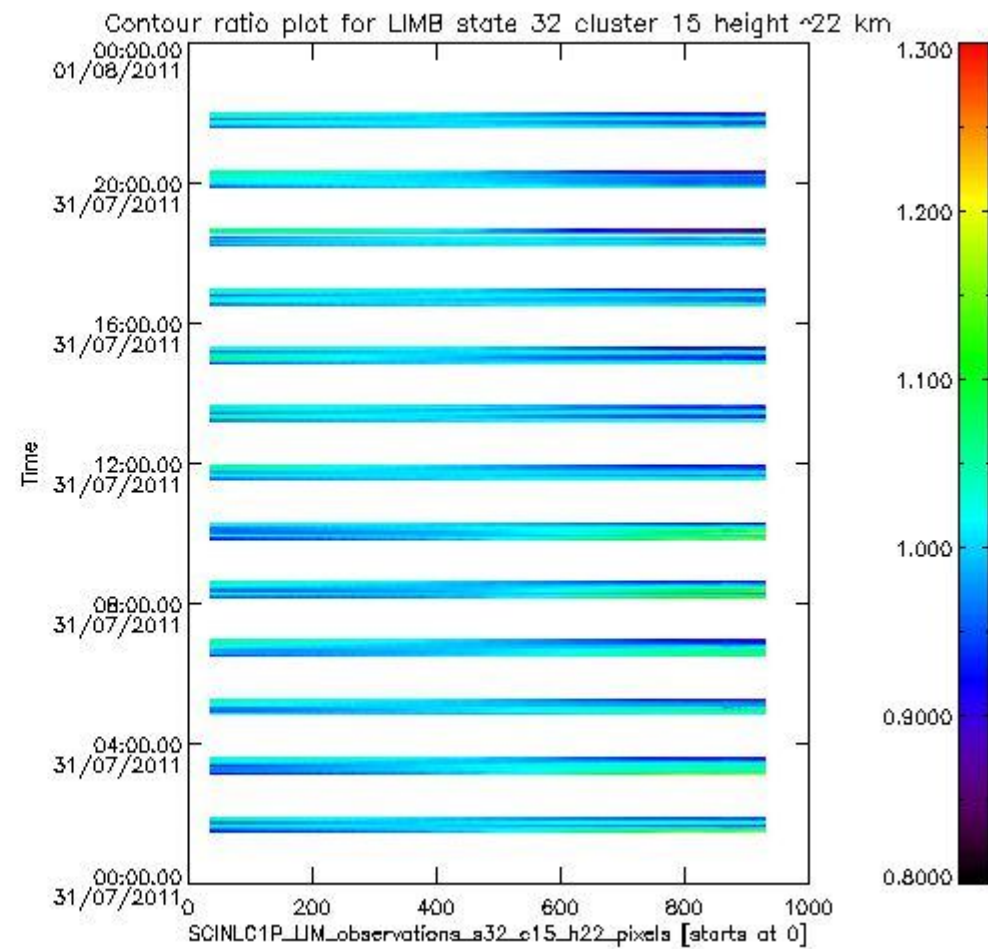
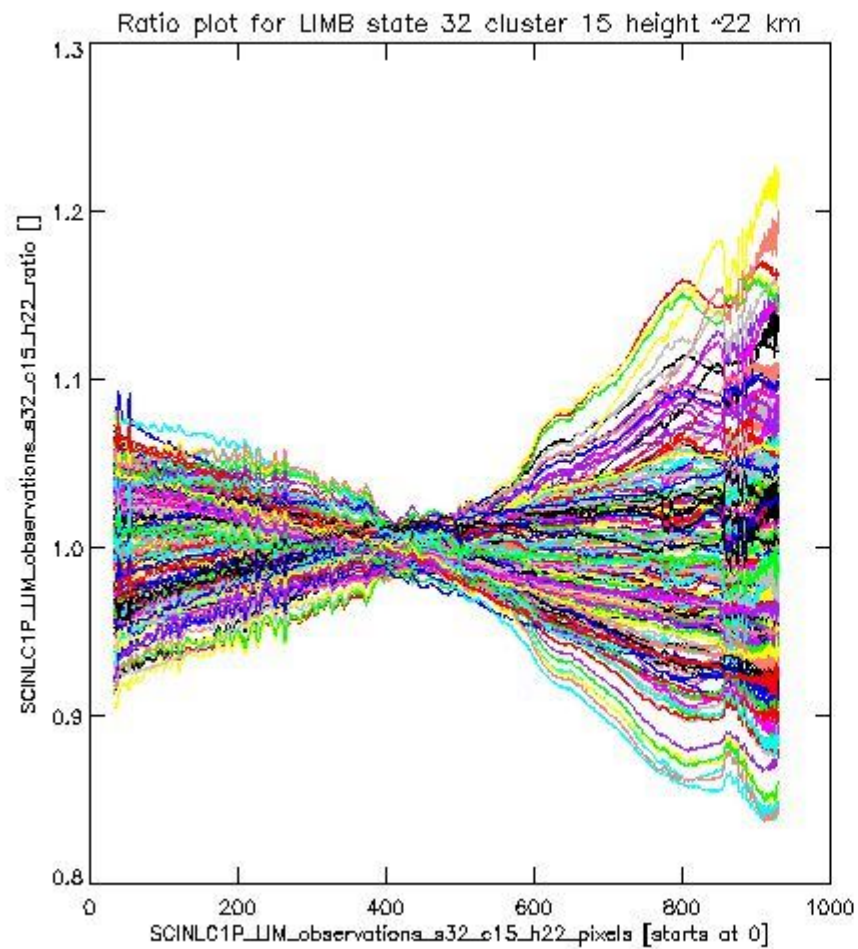
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_15.PNG

**1.2.9 LIMB state 32 cluster 15 height ~22 km** The data for the analysis of LIMB state 32 cluster 15 height ~22 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



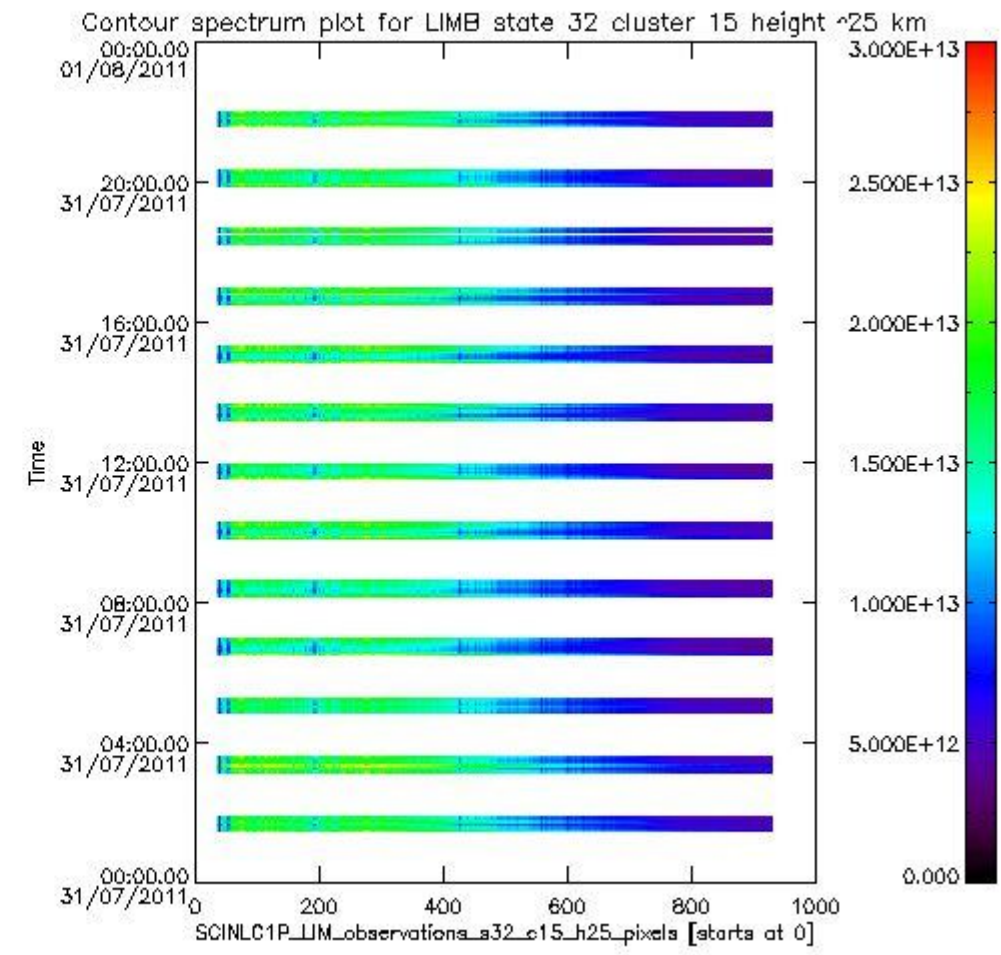
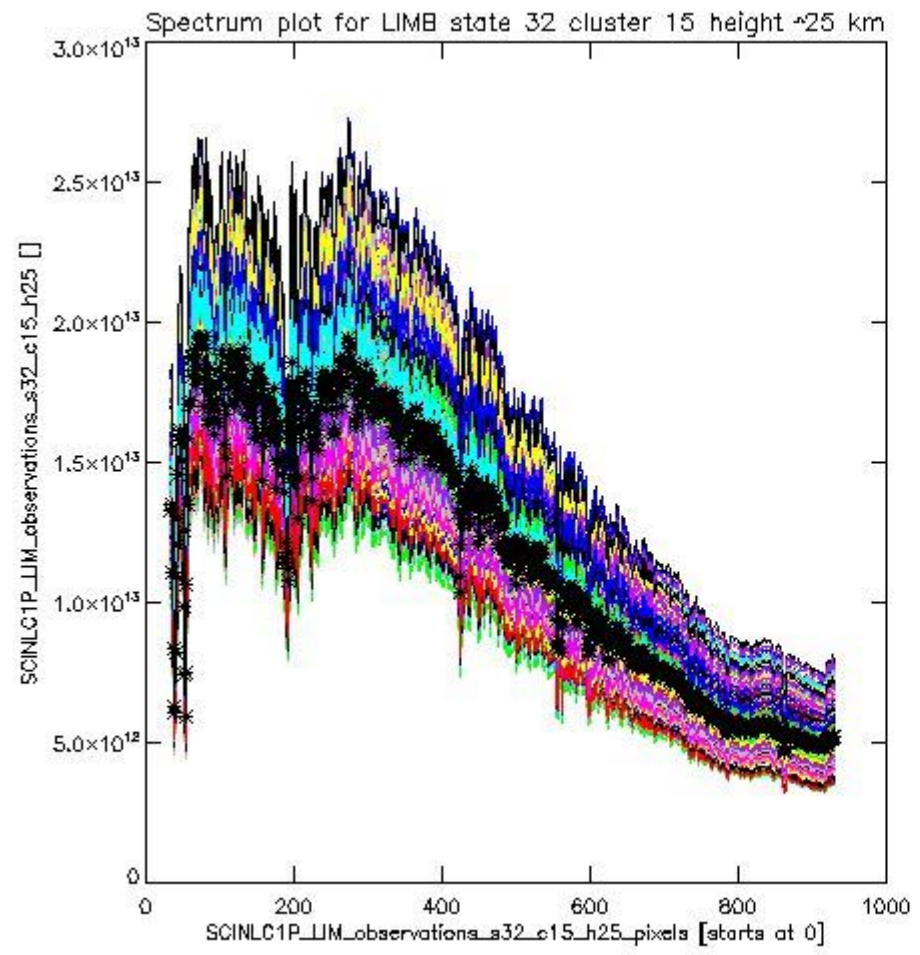
sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_16.PNG



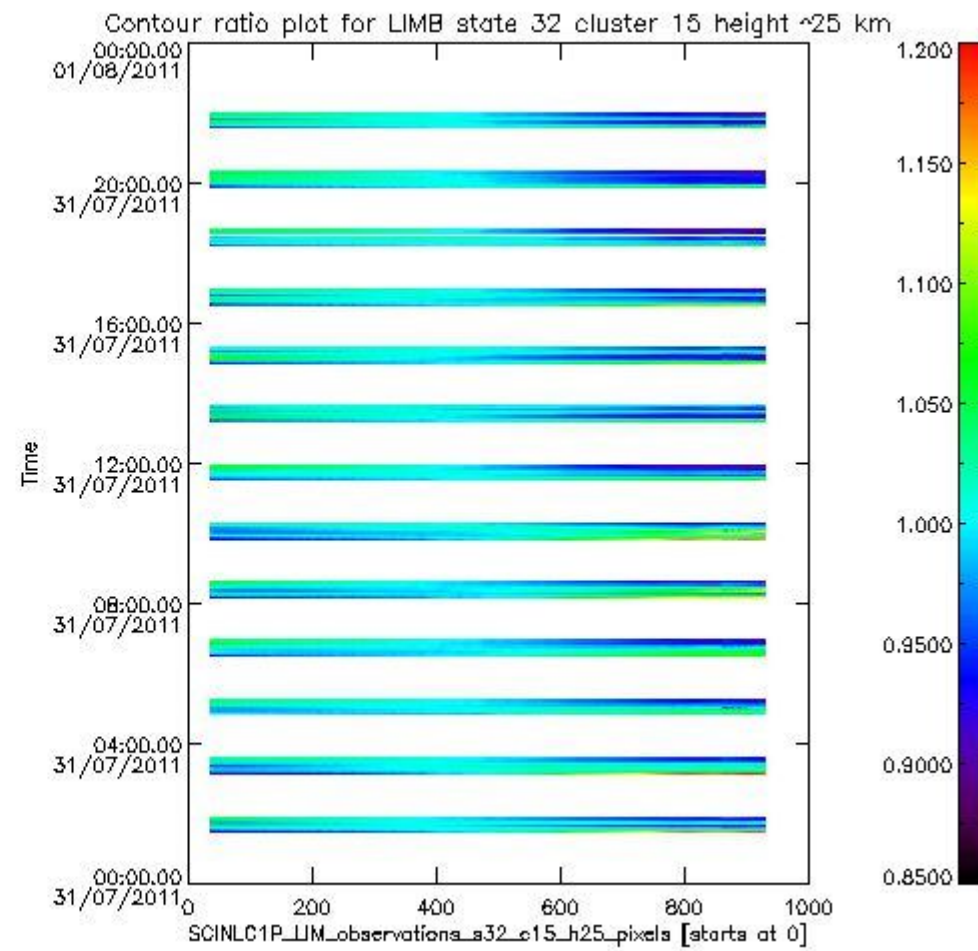
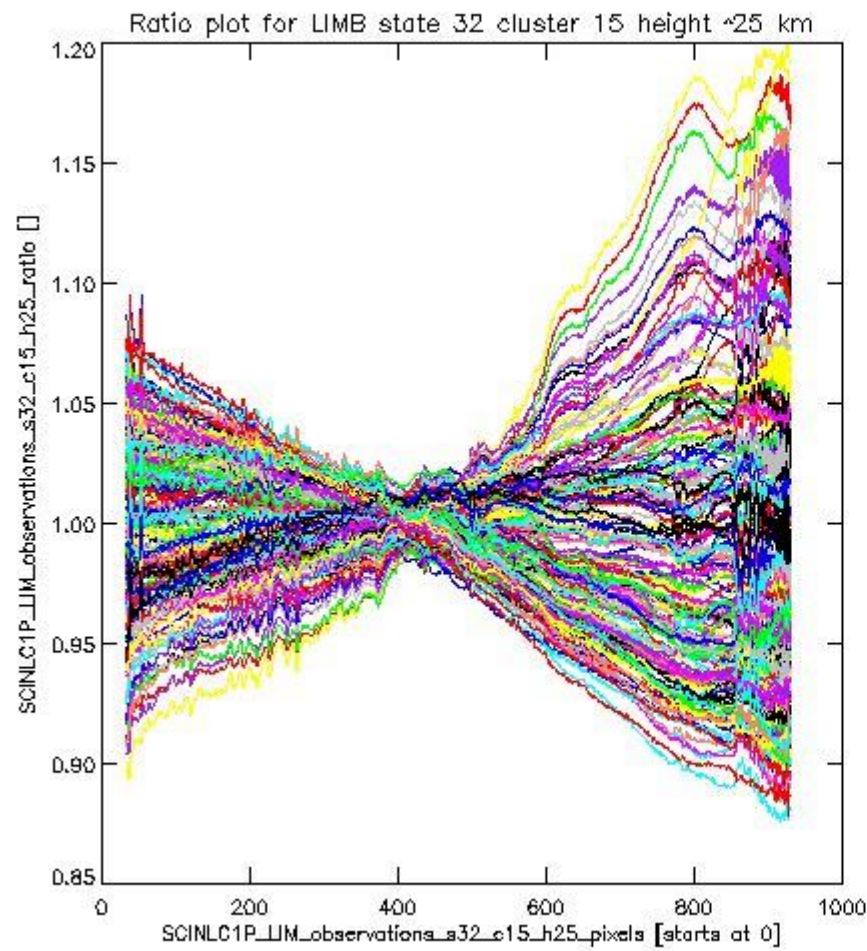
sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_17.PNG

**1.2.10 LIMB state 32 cluster 15 height ~25 km** The data for the analysis of LIMB state 32 cluster 15 height ~25 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929



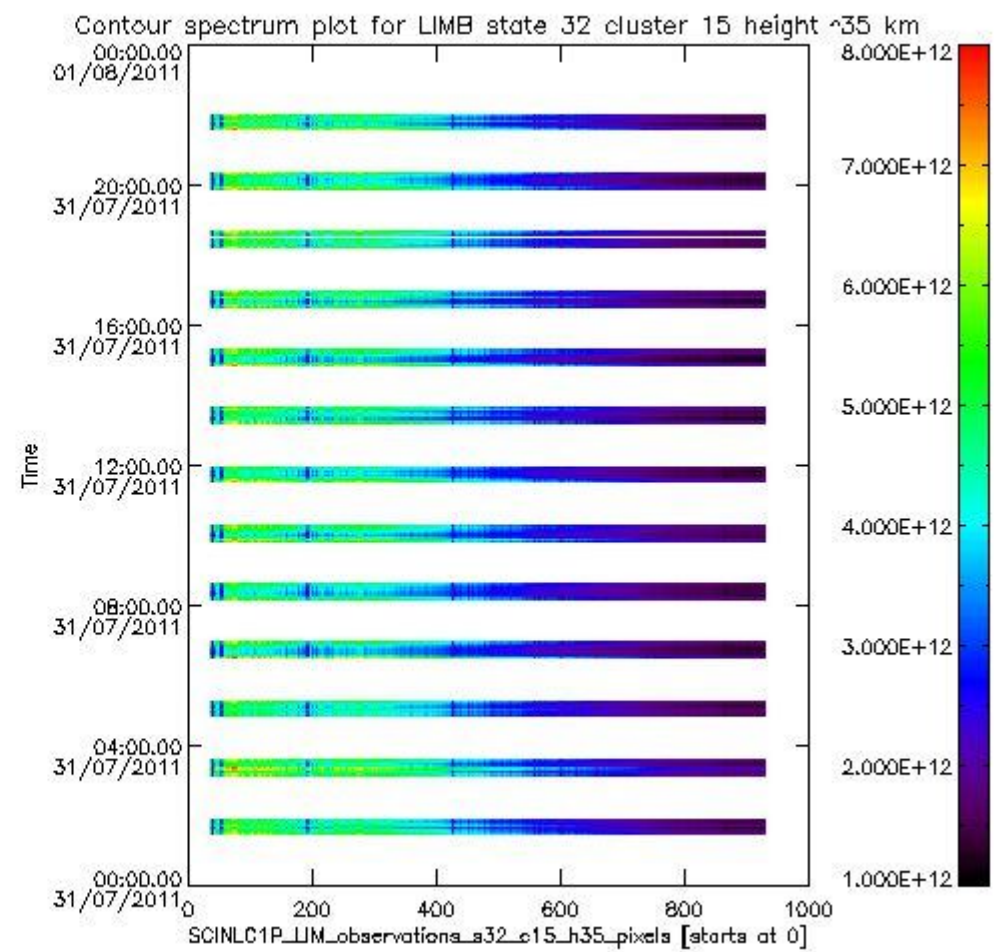
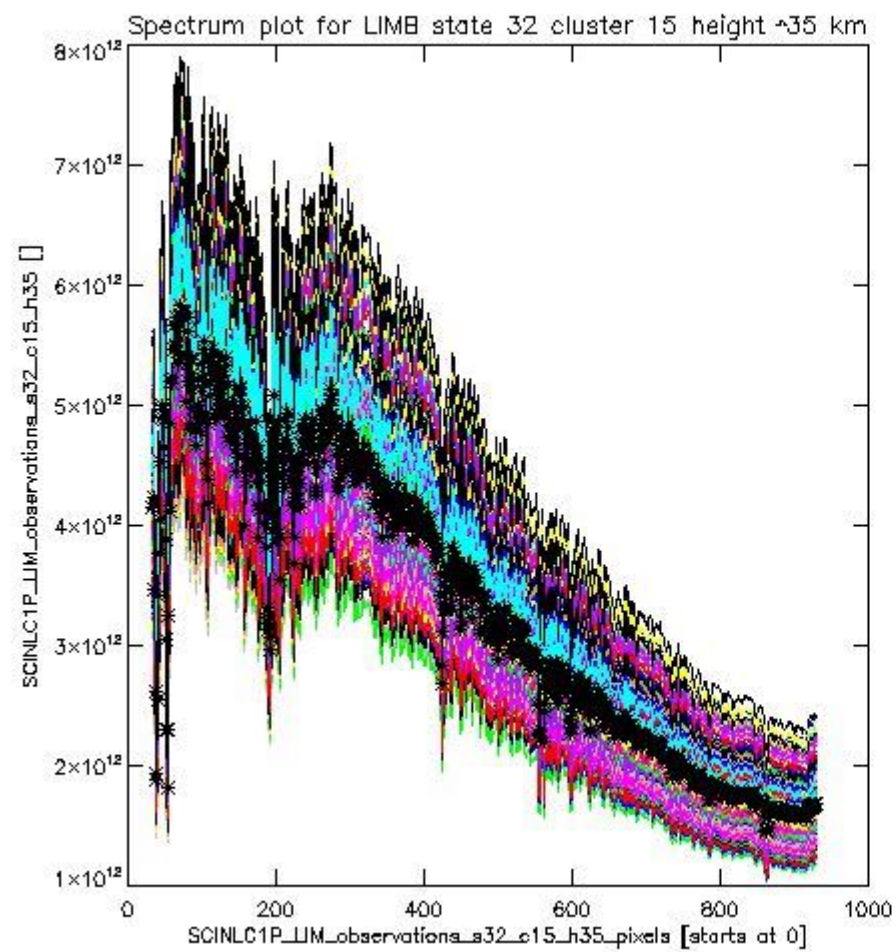
sciamachy\_l1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_18.PNG

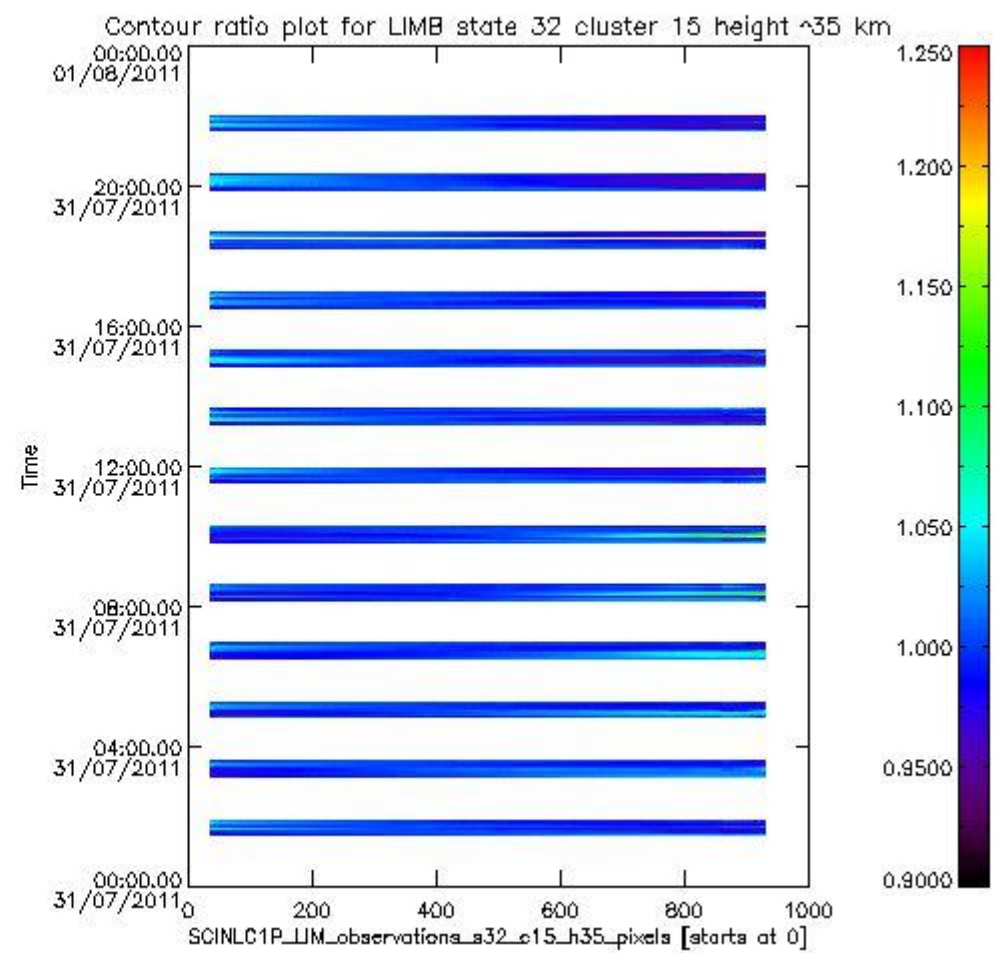
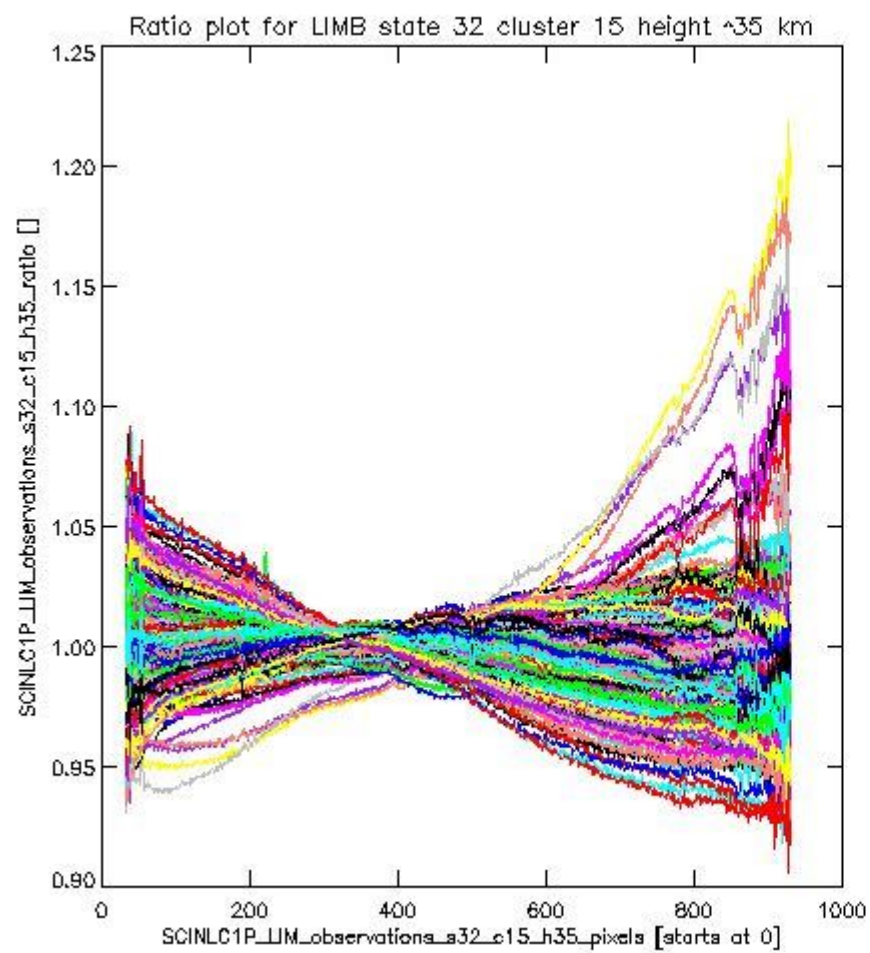


sciamachy\_11b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_19.PNG

**1.2.11 LIMB state 32 cluster 15 height ~35 km** The data for the analysis of LIMB state 32 cluster 15 height ~35 km have the following characteristics:

Item	Value
Start time of first sample	31JUL2011 01:28:01.691
Start time of last sample	31JUL2011 21:57:28.626
Reference period start time	01JUL2011 01:25:32.895
Reference period stop time	30JUL2011 19:13:51.543
Channel number	3
First pixel number (starts at 0)	33
Last pixel number (starts at 0)	929





sciamachy\_i1b\_source\_packet\_report\_SCIA\_7\_04\_U\_20110731\_21.PNG

